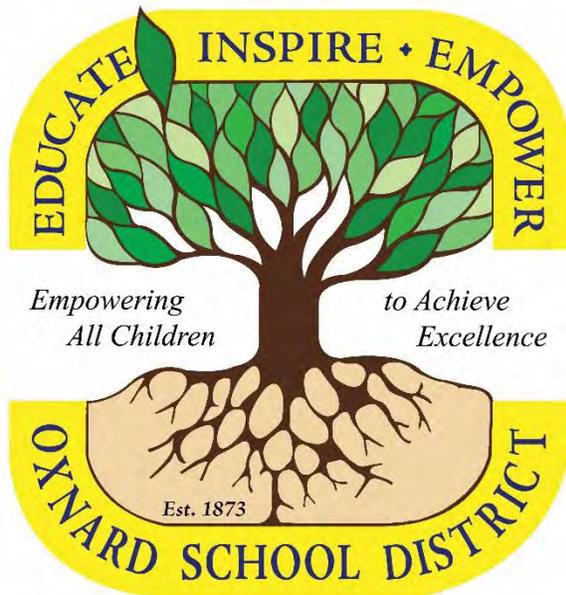


OXNARD SCHOOL DISTRICT

1051 South "A" Street ● Oxnard, California 93030 ● 805/385-1501



BOARD OF TRUSTEES

Mrs. Debra M. Cordes, President
Mr. Ernest "Mo" Morrison, Clerk
Mr. Denis O'Leary, Member
Mrs. Veronica Robles-Solis, Member
Ms. Monica Madrigal Lopez, Member

ADMINISTRATION

Dr. Cesar Morales
District Superintendent
Mrs. Janet C. Penanhoat
Assistant Superintendent,
Business & Fiscal Services
Dr. Jesus Vaca
Assistant Superintendent,
Human Resources & Support Services
Ms. Robin I. Freeman
Assistant Superintendent,
Educational Services

AGENDA #13
REGULAR BOARD MEETING
Wednesday, March 21, 2018
5:00 p.m. – Study Session
Closed Session To Follow
7:00 PM - Regular Board Meeting

***NOTE:** In accordance with requirements of the Americans with Disabilities Act and related federal regulations, individuals who require special accommodation, including but not limited to an American Sign Language interpreter, accessible seating or documentation in accessible formats, should contact the Superintendent's office at least two days before the meeting date.

Persons wishing to address the Board of Trustees on any agenda item may do so by completing a "Speaker Request Form" and submitting the form to the Asst. Supt. of Human Resources. The Speaker should indicate on the card whether they wish to speak during Public Comment or when a specific agenda item is considered.

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

www.oxnardsd.org

OPIE TV – Charter Spectrum Channel 20 &
Frontier Communications - Channel 37

**Section A
PRELIMINARY**

A.1 Call to Order and Roll Call **5:00 PM**

The President of the Board will call the meeting to order. A roll call of the Board will be conducted.

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis ____, O’Leary __, Morrison ____, Cordes __

A.2 Pledge of Allegiance to the Flag

Mr. Jorge Mares, Principal at Marina West School of Environmental Science & Creative Arts, will introduce Abigail London, 5th grader in Mr. Foster’s class, who will lead the audience in the Pledge of Allegiance.

A.3 District’s Vision and Mission Statements

The District’s Vision and Mission Statements will be read in English by Abigail London, 5th grader in Mr. Foster’s class; then read in Spanish by Aaron Santiago Murillo, 4th grader in Mrs. Fries class.

A.4 Presentation by Marina West School of Environmental Science & Creative Arts

Mr. Jorge Mares, Principal will provide a short presentation to the Board regarding Marina West School of Environmental Science & Creative Arts. Following the presentation, President Cordes will present a token of appreciation to the students that participated in the Board Meeting.

A.5 Adoption of Agenda (Superintendent)

Moved:
Seconded:
Vote:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis ____, O’Leary __, Morrison ____, Cordes ____

A.6 Recognition of African American Speech Expo Winners (Freeman)

The Board will recognize the following students who were winners at the African American Speech Expo on Saturday, February 24, 2018. Each of them will share their speech or poem.

- First Place – Catia Tran, Christa McAuliffe School
- Second Place – Janeth Melchor, Cesar Chavez School
- Third Place – Kayla Knight, Juan Soria School

A.7 Closed Session – Public Participation/Comment (Limit three minutes per person per topic)

Persons wishing to address the Board of Trustees on any agenda item identified in the Closed Session agenda may do so by completing a “Speaker Request Form” and submitting the form to the Assistant Superintendent of Human Resources and Support Services. Public Comment shall be limited to fifteen (15) minutes per subject with a maximum of three (3) minutes per speaker.

The Board will now convene in closed session to consider the items listed under Closed Session.

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

**Section A
PRELIMINARY**

(continued)

A.8 Closed Session

-
1. Pursuant to Section 54956.9 of *Government Code*:
 - Conference with Legal Counsel – Anticipated Litigation: 1 case
 - Conference with Legal Counsel – Existing Litigations:
 - J.R. et. v. Oxnard School District et al. Central District No. CV-04304-JAK-FFM

 2. REMOVAL/SUSPENSION/EXPULSION OF A STUDENT (*Education Code 48912; 20 U.S.C. Section 1232g*)
 - Case No. 17-13 (Action Item)

 3. Pursuant to Sections 54957.6 and 3549.1 of the *Government Code*:
 - Conference with Labor Negotiator:
 - Agency Negotiators: OSD Assistant Superintendent, Human Resources & Support Services, and Garcia Hernández & Sawhney, LLP
 - Association(s): OEA, OSSA, CSEA;
 - and All Unrepresented Personnel – Administrators, Classified Management, Confidential

 4. Pursuant to Section 54956.8 of the *Government Code*:
 - Conference with Real Property Negotiators (for acquisition of new school site):
 - Property: Parcel located Teal Club Road, North of Teal Club Road, South of Doris Avenue
 - Agency Negotiators: Superintendent/Deputy Superintendent, Business & Fiscal Services/ Garcia Hernandez & Sawhney, LLP/ Caldwell Flores Winters Inc.
 - Negotiating Parties: Dennis Hardgrave on behalf of the property owners
 - Under Negotiations: Instruction to agency negotiator on price and terms.

 5. Pursuant to Section 54957 of the *Government Code* and Section 44943 of the *Education Code* the Board will consider personnel matters, including:
 - Public Employee(s) Discipline/Dismissal/Release Vaca

A.9 Reconvene to Open Session

7:00 PM

A.10 Report Out of Closed Session

The Board will report on any action taken in closed session or take action on any item considered in closed session, including expulsion of students:
REMOVAL/SUSPENSION/EXPULSION OF STUDENTS
(*Education Code 48912; 20 U.S.C. Section 1232g*)
Case No. 17-13 (Action Item)

Motion: _____, Second: _____

Roll Call Vote:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section A
PRELIMINARY
 (continued)

A.11 Recognition of Oxnard School District's Million Word Readers (Freeman/Curtis)

The Board of Trustees will recognize Oxnard School District students who have read One Million Words.

A.12 Adoption and Presentation of Resolution #17-31 Call for Full and Fair Funding in California Public Schools (Morales)

The Board of Trustees will adopt Resolution #17-31 in a collective effort to obtain full and fair school funding to shape California for generations to come.

A.13 Adoption and Presentation of Resolution #17-32 – Student Safety in California's Public Schools (Morales)

The Board of Trustees will adopt Resolution #17-32 in recognition of the issue of school safety – in all its various forms – that includes a call for the U.S. Congress to pass legislation that will reduce the threat of gun violence on school campuses, and direct the District Superintendent to distribute said resolution.

A.14 Measure R Bond Oversight Committee Annual Report (Penanhoat)

The Board of Trustees will receive a presentation on the Bond Oversight Committee's fifth annual report per Proposition 39 requirements.

A.15 Plazas Comunitarias Program Abroad Presentation (Vaca)

The board will receive a presentation about Mexico's Plazas Comunitarias Program Abroad, which seeks to provide Mexican migrants in the United States with the fundamentals of a basic education, while encouraging their academic development and growth for better life conditions. The target populations are Hispanic individuals 15 years of age or over who did not complete their formal basic education and are illiterate or have not concluded their primary or secondary education.

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section B
PUBLIC COMMENT/HEARINGS

B.1 Public Comment (3 minutes per speaker)

Members of the public may address the Board on any matter within the Board's jurisdiction at this time or at the time that a specific agenda item is being considered. Comments should be limited to three (3) minutes. Please know this meeting is being video-recorded and televised. The Board particularly invites comments from parents of students in the District.

B.1 Comentarios del Público (3 minutos para cada ponente)

Los miembros del público podrán dirigirse a la Mesa Directiva sobre cualquier asunto que corresponda a la jurisdicción de la Mesa Directiva en este periodo o cuando este punto figure en el orden del día y sea analizado. Los comentarios deben limitarse a tres (3) minutos. Tenga presente que esta reunión está siendo grabada y televisada. La Mesa Directiva invita en particular a los padres y alumnos del distrito a que presenten sus comentarios.

B.2 Public Hearing – Conduct Public Hearing for the Final Environmental Impact Report Prepared for the Doris/Patterson Project (Penanhoat/Fateh/CFW)

The purpose of this Agenda Item is to conduct a public hearing to receive public comments on the District's Final Environmental Impact Report (EIR) for the Doris Avenue/Patterson Road Educational Facilities Project (proposed project). The District proposes to construct and operate joint-use facilities to support a district administrative office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The Board set the date for this public hearing at their March 7, 2018 meeting.

Public Comment:
Presentation:
Moved:
Seconded:
Board Discussion:
Vote:

The District retained Tetra Tech to prepare the EIR. The EIR evaluates potential impacts from all phases of project planning, implementation, and operation for the proposed project. The EIR serves as a public disclosure document explaining the effects of the proposed project on the environment, alternatives to the project, and ways to minimize adverse effects and to increase beneficial effects. On December 4, 2017, the District opened a 45-day public review and comment period on the Draft EIR. The public comment period on the Draft EIR closed on January 17, 2018. Comments on the Draft EIR have been incorporated into the Final EIR. The Final EIR document is on the Action section of tonight's agenda for the Board's consideration.

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, and the Director of Facilities, in conjunction with Caldwell Flores Winters, that the Board of Trustees receive public comment on the Final Environmental Impact Report (EIR) prepared for the Doris/Patterson Project.

Roll Call Vote:

Madrigal Lopez ____, **Robles-Solis** ____, **O'Leary** ____, **Morrison** ____, **Cordes** ____

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section C CONSENT AGENDA

(All Matters Specified as Consent Agenda are considered by the Board to be routine and will be acted upon in one motion. There will be no discussion of these items prior to the time the Board votes on the motion unless members of the Board request specific items be discussed and/or removed from the Consent Agenda.)

Notes:
Moved:
Seconded:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

C.1 Acceptance of Gifts

It is recommended that the Board accept the following gifts:	Dept/School
<ul style="list-style-type: none"> ▪ From Oxnard Educators Association, a donation of books to the Marina West Library in honor of Dr. Seuss’ Birthday. 	Mares

C.2 Agreements

It is recommended that the Board approve the following agreements:	Dept/School
--	-------------

Enrichment:

- | | |
|--|--------------------|
| <ul style="list-style-type: none"> ▪ #17-275 – Achieve NOW, to provide two (2) Family Science Night’s at Ramona School on Wednesday, May 23, 2018, to promote their STREAM focus and PBL activities within and outside the classroom. Students will rotate through multiple science lab experiments centered on the Next Generation Science Standards; amount not to exceed \$2,498.00, to be paid with PTA funds; | Freeman/
Duran |
| <ul style="list-style-type: none"> ▪ #17-278 – Carson Entertainment, to provide a magic show for the students in the after school program on Wednesday, April 11, 2018. The show is designed as an enrichment activity for the students. The show will be performed at the Oxnard Performing Arts Center. Carson Entertainment will be donating the second performance to the Oxnard School District to be used as a fundraiser; amount not to exceed \$4,000.00, to be paid with ASES Grant funds; | Freeman/
Thomas |
| <ul style="list-style-type: none"> ▪ #17-279 – Oxnard Performing Arts Center for the rental of the Oxnard Performing Arts Center (OPAC) on Wednesday, April 11, 2018 to hold the Magic Show with Garry Carson for students in the after school program; amount not to exceed \$3,327.25, to be paid with ASES Grant funds; | Freeman/
Thomas |

Support Services:

- | | |
|--|-----------------|
| <ul style="list-style-type: none"> ▪ #17-282 – Terra Firma Enterprises, to evaluate and assess the District Office and school sites coordination and communication capabilities during an Emergency Operations Center activation. The functional exercise will incorporate activities from selected school sites, the City of Oxnard, and essential stakeholders; amount not to exceed \$21,060.00, to be paid from General Fund. | Vaca/
Magana |
|--|-----------------|

C.3 Ratification of Agreements

It is recommended that the Board ratify the following agreements:	Dept/School
---	-------------

Enrichment:

- | | |
|---|------------------|
| <ul style="list-style-type: none"> ▪ Ratification of Amendment #1 to Agreement/MOU #17-232 – Buck Institute for Education, to provide a total of four days of professional development services for teachers. Due to the Ventura County fires, one of the four days requires rescheduling. Original contract in the amount of \$14,500.00, Amendment #1 in the amount of \$2,750.00 is required to cover the travel fees associated with the rescheduled date, bringing the total contract amount to \$17,250.00; amendment amount not to exceed \$2,750.00, to be paid with MSAP funds. | Freeman/
West |
|---|------------------|

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section C CONSENT AGENDA

(continued)

C.3 Ratification of Agreements (continued)

It is recommended that the Board ratify the following agreements: Dept/School

Enrichment:

- Ratification of Amendment #1 to Agreement/MOU #17-30 – Hip Hop Mindset, to provide Enrichment Activities for the period of June 21, 2017 through June 30, 2018, original contract amount of \$45,000.00. Amendment #1 is to cover an increase in enrichment activities at schools in Oxnard School District, amendment amount not to exceed \$15,000.00, bringing the total contract amount to \$60,000.00, to be paid with ASES Grant funds. Freeman/
Thomas

Special Education:

- Agreement #17-266 – Provo Canyon School Inc., NPS, ratification for Non-Public School (NPS) services for Student AH112906, for the 2017-2018 school year, including Extended School Year. The Non-Public School will provide a program of instruction which is consistent with the pupil's individual educational plan as specified in the individual service agreement, amount not to exceed \$63,831.00, to be paid with Special Education funds; Freeman/
Sugden
- Agreement #17-277 – Ventura County Office of Education (VCOE), Special Circumstances Paraeducator Services, ratify the service agreement with VCOE for the 2017-2018 school year, to provide exceptional services to special education students that consist of support from Special Circumstances Paraeducators, including Extended School Year, amount not to exceed \$108,780.00, to be paid with Special Education funds. Freeman/
Sugden

Support Services:

- Approval of Amendment #1 to Agreement #17-34 – American Logistics Company, LLC to provide home-to-school transportation for the period of August 1, 2017 through June 30, 2018, original contract in the amount of \$25,000.00. Amendment #1 in the amount of \$25,000.00 is required is to cover the additional cost of transporting Foster Youth, McKinney-Vento and Special Education students transported to public schools and residences outside of the District, bringing the total contract amount to \$50,000.00. The increase will be paid through the General Fund. Penanhoat/
Briscoe

C.4 Setting of Date for Public Hearing – School Facilities Needs Analysis

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees set the date of Wednesday, April 18, 2018, for a public hearing on the Oxnard School District 2018 School Facilities Needs Analysis Report; no fiscal impact. Dept/School
Penanhoat

C.5 Setting of Date for Public Hearing – Increase of Statutory School Facilities Fees

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees set the date of Wednesday, April 18, 2018, for a public hearing on the increase of statutory school facilities fees as outlined above. Dept/School
Penanhoat

C.6 Approval of Overnight Field Trip and Agreement #17-280 – Camp Whittier

6th grade students from Chavez School will attend a four-day overnight field trip at Camp Whittier during the period of May 22-25, 2018. It is the recommendation of the Principal, Chavez School, and the Assistant Superintendent, Educational Services, that the Board of Trustees approve the Overnight Field Trip and Agreement #17-280 with Camp Whittier, at no cost to the district. Dept/School
Freeman/
Perez

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section C
CONSENT AGENDA

(continued)

C.7 Approval of Overnight Field Trip to CSU Channel Islands Santa Rosa Islands

The California State University of Channel Island proposes to organize, financially support, and lead 4 three-day field trips for participating classes at RJ Frank Middle School. The dates are as follows April 16-18/April 18-20/April 22-25/April 25-27. Students will be traveling to the CSU Channel Islands Santa Rosa Island Research Station for an overnight field trip that is a critical component of the Crossing the Channel program collaboration between R.J Frank and California State University of Channel Islands. It is recommended that the Assistant Superintendent, Educational Services, the Principal of R.J. Frank Middle School that the Board of Trustees approve the overnight fieldtrip.

Dept/School
Freeman/
Caldwell

C.8 Establish/Abolish/Increase/Reduce Hours of Position

It is the recommendation of the Assistant Superintendent, Human Resources and Support Services, that the Board of Trustees approve the establishment, abolishment, increase, and reduction of positions, as presented.

Dept/School
Vaca

C.9 Personnel Actions

It is the recommendation of the Assistant Superintendent, Human Resources and Support Services, that the Board of Trustees approve the Personnel Actions, as presented.

Dept/School
Vaca

**Note: No new items will be considered after 10:00 p.m. in accordance with
Board Bylaws, BB 9323 – Meeting Conduct**

**Section D
ACTION ITEMS**

(Votes of Individual Board Members must be publicly reported.)

D.1 Approve Resolution #17-30 Making a Determination and Adopting the Final Environmental Impact Report for the Doris/Patterson Project (Penanhoat/Fateh/CFW)

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, and the Director of Facilities, in conjunction with Caldwell Flores Winters, that the Board of Trustees approve Resolution #17-30 making a determination and Adopting the Final Environmental Impact Report for the Doris/Patterson Project.

Public Comment:
Presentation:
Moved:
Seconded:
Board Discussion:
Vote:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

D.2 Approval of Resolution #17-29 Adopting a Supplementary Retirement Plan and Agreement #17-281 with PARS to Provide Consultation Services (Penanhoat)

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees approve Resolution #17-29 and Agreement #17-281 with PARS as outlined above.

Public Comment:
Presentation:
Moved:
Seconded:
Board Discussion:
Vote:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

D.3 2017-18 Second Interim Report (Penanhoat/Crandall/Plasencia)

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, and the Director of Finance that the Board of Trustees accept the 2017-18 Second Interim Report as presented, and authorize the filing of a Positive Certification with the Ventura County Office of Education.

Public Comment:
Presentation:
Moved:
Seconded:
Board Discussion:
Vote:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

D.4 Reimbursement for Teacher Substitute at Rio School District (Penanhoat)

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees approve reimbursement to Rio School District as stipulated by Education Code Section 44987.3.

Public Comment:
Presentation:
Moved:
Seconded:
Board Discussion:
Vote:

ROLL CALL VOTE:

Madrigal Lopez __, Robles-Solis __, O’Leary __, Morrison __, Cordes __

Note: No new items will be considered after 10:00 p.m. in accordance with Board Bylaws, BB 9323 – Meeting Conduct

Section E
APPROVAL OF MINUTES

No minutes will be approved at this meeting.

**Note: No new items will be considered after 10:00 p.m. in accordance with
Board Bylaws, BB 9323 – Meeting Conduct**

Section F
BOARD POLICIES

(These are presented for discussion or study.
Action may be taken at the discretion of the Board.)

No Board policies will be approved at this meeting.

**Note: No new items will be considered after 10:00 p.m. in accordance with
Board Bylaws, BB 9323 – Meeting Conduct**

Section G CONCLUSION

G.1 Superintendent's Announcements *(3 minutes)*

A brief report will be presented concerning noteworthy activities of district staff, matters of general interest to the Board, and pertinent and timely state and federal legislation.

Notes:

G.2 Trustees' Announcements *(3 minutes each speaker)*

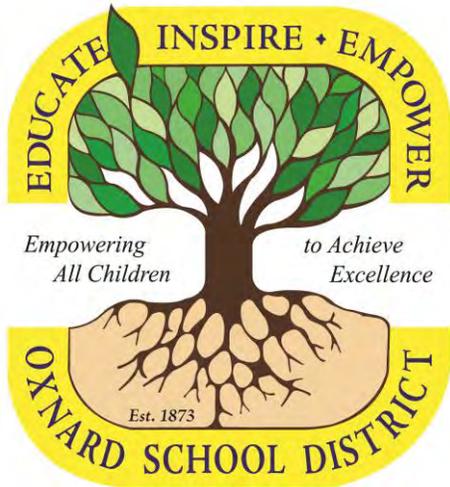
The trustees' report is provided for the purpose of making announcements, providing conference and visitation summaries, coordinating meeting dates, identifying board representation on committees, and providing other information of general interest.

Notes:

G.3 ADJOURNMENT

Moved:
Seconded:
Vote:

**Note: No new items will be considered after 10:00 p.m. in accordance with
Board Bylaws, BB 9323 – Meeting Conduct**



Vision:

Empowering All Children to Achieve Excellence

Mission:

Ensure a culturally diverse education for each student in a safe, healthy and supportive environment that prepares students for college and career opportunities.



Visión:

Capacitar a cada alumno para que logre la excelencia académica

Misión:

Asegurar una educación culturalmente diversa para todo el alumnado en un ambiente seguro, saludable y propicio que les prepare para la Universidad y el acceso a oportunidades para desarrollar una carrera profesional.

OSD BOARD AGENDA ITEM

Name of Contributor: Robin I. Freeman

Date of Meeting: 3/21/18

- A. Preliminary Study Session: _____
- B. Hearing: _____
- C. Consent Agenda _____ Agreement Category:
_____ Academic
_____ Enrichment
_____ Special Education
_____ Support Services
_____ Personnel
_____ Legal
_____ Facilities
- D. Action Items _____
- E. Report/Discussion Items (no action) _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

Recognition of African American Speech Expo Winners (Freeman)

The board will recognize the following students who were co-winners at the African American Speech Expo on Saturday, February 24, 2018. Each of them will share their speech or poem.

- Catia Tran, 1st Place – McAuliffe School
- Janeth Melchor, 2nd Place – Chavez School
- Kayla Knight, 3rd Place – Soria School

FISCAL IMPACT: None

RECOMMENDATION: It is the recommendation of the Assistant Superintendent, Educational Services that the Board of Trustees accept this item as presented.

ADDITIONAL MATERIAL: None

OSD BOARD AGENDA ITEM

Name of Contributor: Robin I. Freeman

Date of Meeting: 3/21/18

- A. Preliminary X
Study Session: _____
- B. Hearing: _____
- C. Consent Agenda _____ Agreement Category:
_____ Academic
_____ Enrichment
_____ Special Education
_____ Support Services
_____ Personnel
_____ Legal
_____ Facilities
- D. Action Items _____
- E. Report/Discussion Items (no action) _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

**Recognition of Students - Honoring Oxnard School District's Million Word Readers
(Freeman/Curtis)**

Students who have read One Million Words will be recognized by the Board of Trustees. Students will receive a t-shirt that states, "I Read 1,000,000 Words What's your Superpower."

FISCAL IMPACT: None

RECOMMENDATION: It is the recommendation of the Assistant Superintendent, Educational Services and the Director of Curriculum, Instruction and Accountability that the Board of Trustees accept this item as presented.

ADDITIONAL MATERIAL: None

BOARD AGENDA ITEM

Name of Contributor(s): Dr. Morales

Date of Meeting: March 21, 2018

- Study Session _____
- Closed Session _____
- A. Preliminary X
- B. Hearing _____
- C. Consent Agenda _____
- D. Action Items _____
- E. Reports/Discussion Items (no action) _____
- F. Board Policies: 1st Reading _____ 2nd Reading _____

Adoption of Resolution #17-31 – Call for Full and Fair Funding in California Public Schools

As part of its ongoing work to ensure that all Oxnard School District students benefit from the resources needed for a high-quality education, the Oxnard School District Board of Trustees is calling on the Legislature to raise school funding to the national average by 2020 and to the average of the top 10 states by 2025. The resolution asks the Legislature to raise funding to a level that allows schools to prepare all students – regardless of background – for success in college, career and civic life.

Currently, California ranks 41st in per-pupil funding, 45th in the percentage of revenue devoted to public schools, and last or nearly last in almost every measure of school staffing, such as student-teacher ratio or the number of counselors, students, librarians or nurses per student.

Recent efforts to address the funding issue, like the Local Control Funding Formula (LCFF), simply restored funding to pre-recession levels of 2007, doing little to close the funding gap between California and other states. In order to better serve Oxnard School District students, rectify years of underinvestment in California public schools and build a brighter future for this state, the Oxnard School District is proud to join school districts across the state in calling for Full and Fair Funding of California public schools.

FISCAL IMPACT: None

RECOMMENDATION:

It is recommended that the Board of Trustees adopt Resolution #17-31, a Full and Fair Funding resolution, in a collective effort to obtain full and fair school funding to shape California for generations to come, and direct the District Superintendent to distribute said resolution.

ADDITIONAL MATERIAL(S):

- Resolution #17-31



Resolution #17-31

OXNARD SCHOOL DISTRICT

Resolution of the Oxnard School District Board of Trustees Calling for Full and Fair Funding of California's Public Schools

WHEREAS, California has the sixth largest economy in the world, and the largest Gross Domestic Product (GDP) of any state in the nation; and

WHEREAS, despite California's leadership in the global economy, the state falls in the nation's bottom quintile on nearly every measure of public K-12 school funding and school staffing; and

WHEREAS, California ranks 45th nationally in the percentage of taxable income spent on education, 41st in per-pupil funding, 45th in pupil-teacher ratios and 48th in pupil-staff ratios; and

WHEREAS, K-12 school funding has not substantially increased, on an inflation-adjusted basis, for more than a decade; and

WHEREAS, under the Local Control Funding Formula (LCFF), state funding for K-12 schools has only recently returned to levels predating the Great Recession of 2007; and

WHEREAS, the modest revenue increases since the implementation of LCFF have been eroded by rapidly increasing costs for health care, pensions, transportation and utilities; and

WHEREAS, 58 percent of California's public school students are eligible for free and reduced-price lunch – 13 percent above the national average - and 23 percent of California students are English learners, more than twice the national average; and

WHEREAS, California's investment in public schools is out of alignment with its wealth, its ambitions its demographics and the demands of a 21st-century education; and

WHEREAS, in 2007, a bipartisan group of California leaders commissioned a report titled *Getting Down to Facts*, which stated it would take an additional \$17 billion annually to meet the State Board of Education achievement targets for K-12 schools; and

WHEREAS, in 2016, a California School Boards Association (CSBA) report, *California's Challenge: Adequately Funding Education in the 21st Century*, updated the *Getting Down to Facts* data and determined that, adjusting for inflation, an additional \$22 billion to \$40 billion annually would be required to provide all public school students with access to a high-quality education; and

WHEREAS, California funds schools at roughly \$1,961 per student less than the national average, which translates to approximately \$3,462 per student when adjusted for California being a high-cost state; and

WHEREAS, California trails the average of the top 10 states by almost \$7,000 in per-pupil funding; and

WHEREAS, in *Robles-Wong v. State of California*, a group of plaintiffs led by CSBA argued that California's school funding system violated Article IX of the State Constitution by denying all students access to an education that prepares them for economic security and full participation in our democratic institutions; and

WHEREAS, the California Supreme Court declined to hear the case by a 4-3 margin, prompting Justice Goodwin H. Liu to write: "It is regrettable that this court, having recognized education as a fundamental right in a landmark decision 45 years ago [Serrano v. Priest (1971) 5 Cal.3d 584] should now decline to address the substantive meaning of that right."; and

WHEREAS, in order to prepare our students for participation in a democratic society and an increasingly competitive, technology-driven global economy, California must fund schools at a level sufficient to support student success; and

WHEREAS, despite its vast wealth, California has consistently underfunded public education while widening its scope, adding new requirements and raising standards without providing appropriate resources to prepare all students for college, career and civic life; and

WHEREAS, if California is to close opportunity and achievement gaps and create a public school system that offers consistently high levels of education, the State must provide schools with the resources to meet the needs of their specific populations; and

NOW THEREFORE BE IT RESOLVED, that the governing board of the Oxnard School District urges the State Legislature to fund California public schools at the national average or higher by the year 2020, and at a level that is equal to or above the average of the top 10 states nationally by 2025 and to maintain, at a minimum, this level of funding until otherwise decreed.

Adopted this 21st day of the month of March in 2018.

President, Board of Trustees

Clerk, Board of Trustees

Member, Board of Trustees

Member, Board of Trustees

Member, Board of Trustees

BOARD AGENDA ITEM

Name of Contributor(s): Dr. Morales

Date of Meeting: March 21, 2018

- Study Session _____
- Closed Session _____
- A. Preliminary X
- B. Hearing _____
- C. Consent Agenda _____
- D. Action Items _____
- E. Reports/Discussion Items (no action) _____
- F. Board Policies: 1st Reading _____ 2nd Reading _____

Adoption of Resolution #17-32 – Student Safety in California’s Public Schools

The State of California is home to 6.2 million public school students, 12 percent of the nation’s total. We have a duty not only to educate these students, but also to protect and nurture them. Academic achievement, which is our primary charge, occurs at the highest levels when students feel safe, cared for and supported.

Recent events have only reinforced our obligations as the stewards of California schools. We must be vigilant where security is concerned, diligent in our attention to positive school culture and unrelenting in our advocacy for policies that increase student safety.

The Oxnard School District urges the state of California and the United States Congress to implement commonsense measures that prioritize student safety and environments where all students have the opportunity to learn, grow and thrive.

FISCAL IMPACT: None

RECOMMENDATION:

It is recommended that the Board of Trustees adopt Resolution #17-32 in recognition of the issue of school safety – in all its various forms – that includes a call for the U.S. Congress to pass legislation that will reduce the threat of gun violence on school campuses, and direct the District Superintendent to distribute said resolution.

ADDITIONAL MATERIAL(S):

- Resolution #17-32



Resolution #17-32

OXNARD SCHOOL DISTRICT

Resolution of the Oxnard School District Board of Trustees for Student Safety in California's Public Schools

WHEREAS, our public schools are charged not only with supporting student achievement, but also providing a foundation for mental and physical health, personal growth and civic engagement; and

WHEREAS, student safety is a prerequisite for consistently high levels of academic and social development; and

WHEREAS, violence and harassment can not only alienate students from their peers and their environment, thereby impeding learning, but also cause injuries and fatalities; and

WHEREAS, in its May 2017 study, Indicators of School Crime and Safety: 2016, the National Center for Education Statistics found that 21 percent of students aged 12 to 18 said they were bullied at school; and

WHEREAS, in the same study, 16 percent of high school students reported carrying a weapon at any point during the previous 30 days and 4 percent reported carrying a weapon on campus during the previous 30 days; and

WHEREAS, the study also noted that 4 percent of students had access to a loaded gun without adult permission, either at school or away from school, during the school year; and

WHEREAS, the horrific prospect of school shootings made an indelible impression on the national consciousness with the Columbine massacre of 1999; and

WHEREAS, more than 150,000 Americans have experienced a shooting on campus since the Columbine tragedy and hundreds of lives have been lost as result; and

WHEREAS, gun violence on school campuses, while relatively rare, represents a particularly egregious and unacceptable threat to the lives of students, teachers and staff across the country; and

WHEREAS, the recent massacre at Parkland Florida's Marjory Stoneman Douglas High School took 17 lives and shocked the conscience of the nation; and

WHEREAS, gun violence in schools occurs in America with a frequency and a severity that is unparalleled anywhere in the world; and

WHEREAS, exposure to trauma can adversely affect a child's health for the rest of their life; and

WHEREAS, Oxnard School District supports the right of students and staff to attend schools that are safe and free from violence and harassment, especially life-threatening forms of violence; and

WHEREAS, all students, regardless of background, deserve access to services that support and enhance their physical, mental and emotional health; and

WHEREAS, safe schools provide an environment where teaching and learning can flourish; disruptions are minimized; violence, bullying and fear are absent; students are not discriminated against; expectations for behavior are clearly communicated and standards of behavior are maintained; and consequences for infractions are consistently and fairly applied; and

WHEREAS, the most effective approach to creating safe school environments is a comprehensive, coordinated effort including school wide, districtwide and communitywide strategies supplemented with legislation, resources and support at the state and federal legislation level;

NOW, THEREFORE BE IT RESOLVED, that the governing board of the Oxnard School District has completed and holds regular drills as prescribed in both school site and district emergency plans and that said plans involve all school district personnel, law enforcement, fire and medical rescue personnel, emergency management personnel and others essential to preventing, mitigating or resolving any potential crisis.

BE IT FURTHER RESOLVED, that Oxnard School District reviews school site discipline rules and procedures to ensure they are appropriately enforced and that student handbooks explaining codes of conduct, unacceptable behavior and disciplinary consequences are given to all students, parents and caregivers.

BE IT FURTHER RESOLVED, that Oxnard School District will continue to work with a broad spectrum of local community stakeholders, local law enforcement, mental health professionals, parents, students, teachers and staff to take any threats of violence seriously and to develop, implement and monitor policies and programs that foster and support a positive school climate, free from harassment and violence.

BE IT FURTHER RESOLVED, that Oxnard School District urges the state of California and the United States Congress to invest in wraparound services to prevent bullying, harassment, discrimination and violence in our schools and to provide funding for programs and staff such as counselors, nurses and psychologists that support students' mental, physical and emotional health.

BE IT FURTHER RESOLVED, that Oxnard School District asks the United States Congress to pass specific legislation that reduces the risk and severity of gun violence on school campuses and repeals the prohibition against data collection and research on gun violence by the U.S. Center for Disease Control (CDC).

BE IT FURTHER RESOLVED, that Oxnard School District urges the state of California and the United States Congress to implement commonsense measures that prioritize student safety and environments where all students have the opportunity to learn, grow and thrive.

Adopted this 21st day of March in 2018.

President, Board of Trustees

Clerk, Board of Trustees

Member, Board of Trustees

Member, Board of Trustees

Member, Board of Trustees

BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: March 21, 2018

- STUDY SESSION _____
- CLOSED SESSION _____
- SECTION A-I: PRELIMINARY _____
- SECTION A-II: REPORTS X
- SECTION B: HEARINGS _____
- SECTION C: CONSENT AGENDA _____

Agreement Category:

- _____ Academic
- _____ Enrichment
- _____ Special Education
- _____ Support Services
- _____ Personnel
- _____ Legal
- _____ Facilities

SECTION D: ACTION _____

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

MEASURE R BOND OVERSIGHT COMMITTEE ANNUAL REPORT (Penanhoat)

The Assistant Superintendent, Business & Fiscal Services, will introduce Mr. Crittenden Ward, Measure R Bond Oversight Committee chair, who will present the Bond Oversight Committee’s fifth annual report to the Board of Trustees as per Proposition 39 requirements.

FISCAL IMPACT

None.

RECOMMENDATION

None – Information only.

ADDITIONAL MATERIAL

Attached: 2017 Measure R Bond Oversight Committee Annual Report (2 pages)

Financial Information

Measure R Bond Sales

Total Authorization: \$90 million
 Series A—\$18.39 million December 2012
 Series B—\$25.5 million May 2013
 Series C – \$15.75 million October 2014
 Series D - \$30.36 million July 2015
 Total Bond Sales: \$90 million

Measure R Bond Oversight Committee

2017 Meeting Dates

January 9, 2017
 March 6, 2017
 June 5, 2017
 September 11, 2017

Annual Financial & Performance Audit

The integrity of Measure R funds are audited annually by an independent accounting firm. For fiscal year ending June 30, 2017, the District's auditor was Nigro and Nigro, A Professional Accountancy Corporation. As described in the independent firm's audit report, it is the firm's opinion that the financial statements present fairly, in all material respects, the financial position of the Measure R General Obligation Bond Building Fund as of June 30, 2017, and the changes in financial position thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America. In regards to the performance audit, the firm's opinion was that the District complied with compliance requirements for the Measure R General Obligation Bond proceeds. The Bond Oversight Committee has reviewed the independent auditor's reports, and together with their other activities, believe that Measure R funds have been spent in accordance with the language of the voter approved Measure and in a manner consistent with applicable State law.

Measure R General Obligation Bond Building Fund Statement of Revenues, Expenditures, and Changes in Fund Balance For the Fiscal Year Ended June 30, 2017

	Measure "R" Building Fund
REVENUES	
Interest earnings	\$ 310,465
Other local revenue	41,579
Total Revenues	352,044
EXPENDITURES	
Current:	
Services and other operating expenditures	1,635,994
Capital outlay	18,655,364
Total Expenditures	20,291,358
Excess (Deficiency) of Revenues Over (Under) Expenditures	(19,939,314)
Fund Balance, July 1, 2016	45,497,741
Fund Balance, June 30, 2017	\$ 25,558,427

**There were no audit findings in
 2016-17**

Measure R Bond Oversight Committee

2017 Annual Report to the Community

OXNARD SCHOOL DISTRICT
 March 2018



November 2017 Construction Progress at Lemonwood (Left) and Elm (Right)

The Measure R Bond Oversight Committee (Committee) is pleased to report the progress of Measure R projects. Approved by voters in November 2012, Measure R is a \$90 million General Obligation (G.O.) bond authorization to replace portable classrooms, relieve student overcrowding by building and equipping new classrooms and educational facilities and repairing and equipping existing classrooms and educational facilities throughout the District. The District has issued all of the Measure R bond authorization.

Projects under construction include the new reconstructed Lemonwood and Elm schools, a new 12 classroom building at Marshall elementary school, and a new child development center/kindergarten annex at Harrington Elementary School.

The Committee continues to meet for the purpose of actively monitoring all Measure R projects and expenditures, provide proper oversight, controls, and accountability to ensure that Measure R funds are used as they were intended, and make regular reports to the community at-large on the progress of Measure R projects.

All projects are consistent with the project list provided to voters by the District's Board of Trustees. This report provides a summary of program progress and financial information. The Committee will continue to keep the community informed and thank you for your support.

Sincerely,
 Crittenden Ward, Chair
 Measure R Bond Oversight Committee

- **Measure R Bond Oversight Committee**
- Crittenden Ward, Chair
- Community at Large Representative
- Jessica Vargas, Vice Chair
- PTA/SSC Parent Representative

- Karen Hill Scott
- Community at Large Representative
- Nancy Lindholm
- Business Organization Representative

- Alyssa Maria
- Parent/Guardian of Enrolled Child

- Charles McLaughlin
- Bona-fide Taxpayers Organization Member
- Jeanette Padilla
- Senior Citizens Organization Member

• The Committee meets at least quarterly. Each member of the committee is appointed by the District's Board of Trustees for a two year term of service.

• Committee minutes and information on bond funded projects are available on the Bond Oversight Committee page located on the Measure R website:

www.oxnardbondprojects.org

- **Oxnard School District**
- Dr. Cesar Morales
- Superintendent

- **Board of Trustees**
- Ernest Morrison, President
- Debra M. Cordes, Clerk
- Denis O'Leary, Trustee
- Veronica Robles-Solis, Trustee
- Monica Madrigal Lopez, Trustee

Overview of Measure R Projects

Construction Progress

Overview

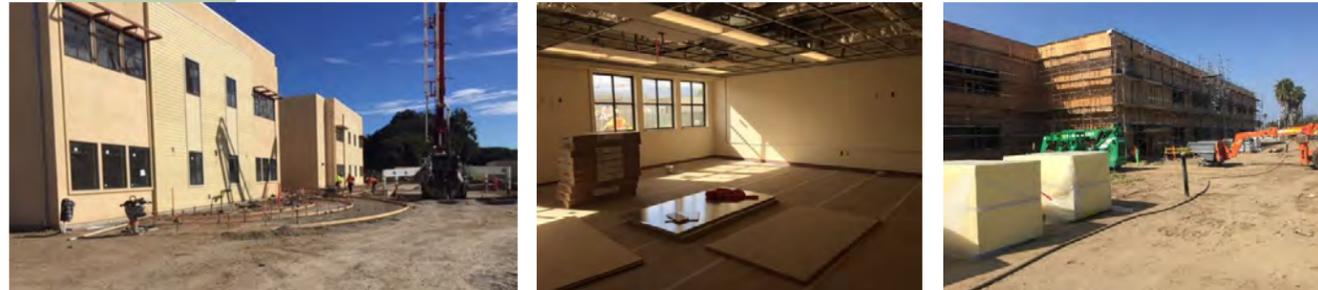
The District has adopted a Master Construct and Implementation Program which is funded through the use of Measure R and Measure D bond programs and other local funding, including developer fees, Mello Roos funds, and capital program balances. The Master Construct and Implementation Program also seeks to maximize State aid reimbursements for modernization and construction of school facilities as State funds become available.

Completed Measure R facility efforts include the acquisition of the Seabridge elementary school site, kindergarten and science lab upgrades to 22 classrooms across eight sites, and the opening of the new Harrington K-5 campus. Projects underway include reconstruction efforts for the new Lemonwood K-8 school and new Elm K-5 campus, a new 12 classroom building at Marshall elementary school, and a new child development center/kindergarten annex at Harrington Elementary School.

Lemonwood Reconstruction

The Lemonwood Reconstruction project commenced in May 2016 and is currently under construction. Construction is planned to occur over two construction phases to minimize disruption to the school. The first construction phase includes a new two-story classroom building for grades 1-8 and multipurpose building. Occupation of the new classroom building and multi-purpose building by students and staff is planned for completion in March 2018. The second phase of construction includes new kindergarten and administration buildings and is scheduled to be completed in February 2019.

When phased construction is complete, the new Lemonwood school will accommodate 900 students by State standards in grades K-8. Specified support facilities, administration areas, media center, food service, multipurpose room, physical education spaces, and restrooms will also be provided.



Lemonwood Construction Progress—November 2017

Elm Reconstruction

Construction began in February 2017 and is on pace to be completed the second half of the 2018-2019 school year. Four new buildings are planned for the site including two-story classroom wing, kindergarten classrooms, and multipurpose and administration facilities. The new reconstruction school is designed to serve up to 600 students per State standards in grades K-5.



Elm Construction Progress—November 2017

Marshall New Classroom Building

Construction efforts commenced in September 2017 towards the development of a new two-story classroom building at Marshall Elementary School. The project has been designed to meet interim 6-8 grade level capacity needs until a new middle school is constructed and to provide Marshall with additional classrooms and a long-term K-8 educational program option. The added building will provide 12 additional permanent classrooms and a redesigned parking area. Construction is scheduled to be completed by September 2018.



New Marshall Classroom Building Groundbreaking Event - October 2017



New Marshall Classroom Building Construction Progress - November 2017

Harrington Early Childhood Development Center/Kindergarten Annex

The Harrington Early Childhood Development Center/Kindergarten Annex project includes the renovation of Building 4 of the original Harrington school to provide kindergarten flexible classroom facilities to serve preschool or kindergarten/transitional kindergarten. Four classrooms that meet preschool and kindergarten requirements are planned as well as improved playground areas. Construction commenced in September 2017 and is scheduled to be completed by summer 2018.



Harrington Child Development Center/Kindergarten Annex Construction Progress - November 2017

OSD BOARD AGENDA ITEM

Name of Contributor: **Dr. Jesus Vaca**

Date of Meeting: **March 21, 2018**

- A. Preliminary Study Session _____
Report X
- B. Hearing: _____
- C. Consent Agenda _____
Agreement Category: _____
 - _____ Academic
 - _____ Enrichment
 - _____ Special Education
 - _____ Support Services
 - _____ Personnel
 - _____ Legal
 - _____ Facilities
- D. Action Items _____
- E. Approval of Minutes _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

Plazas Comunitarias Program Abroad Presentation (Vaca)

The board will receive a presentation about Mexico’s Plazas Comunitarias Program Abroad, which seeks to provide Mexican migrants in the United States with the fundamentals of a basic education, while encouraging their academic development and growth for better life conditions. The target populations are Hispanic individuals 15 years of age or over who did not complete their formal basic education and are illiterate or have not concluded their primary or secondary education.

FISCAL IMPACT:

None

RECOMMENDATION:

Informational only to provide information about the process and the personnel needed to implement the program.

ADDITIONAL MATERIAL:

Power Point Handout: *Board Presentation Plazas Comunitarias Program Abroad* (nine pages)



Board Presentation

Plazas Comunitarias Program Abroad

March 21, 2018



Plazas Comunitarias Program Abroad

- The Plazas Comunitarias Program Abroad is mainly in the U.S. even though the basic educational services (literacy, primary, and secondary) are offered around the world.
- The main motivation to cross into the U.S. for Mexicans is the search of job opportunities, therefore, it is important to give migrants the tools necessary to succeed and find jobs that are well paid.
- Education is fundamental not only to eradicate poverty, but also for individual, family, and community development.
- The Plazas Comunitarias Program Abroad seeks to provide Mexican migrants with the fundamentals of basic education, which will encourage their development, educational continuity, and better life conditions.

How does the Plazas Comunitarias Program Abroad Work?

- The Plazas Comunitarias Program Abroad involves three actors:
 - INEA: Operates the program and provides educational materials of the *Modelo Educativo para la Vida y el Trabajo*, training for educational figures, technical assistance, and certificate emission.
 - IME: Through the network of consulates, it supervises the Plazas Comunitarias and informs INEA of possibilities to open new Plazas Comunitarias in their community.
 - Civil Society: U.S. Organizations that host the program provide tutors and follow up with the students of their Plaza Comunitaria.

Who is the Target Population?

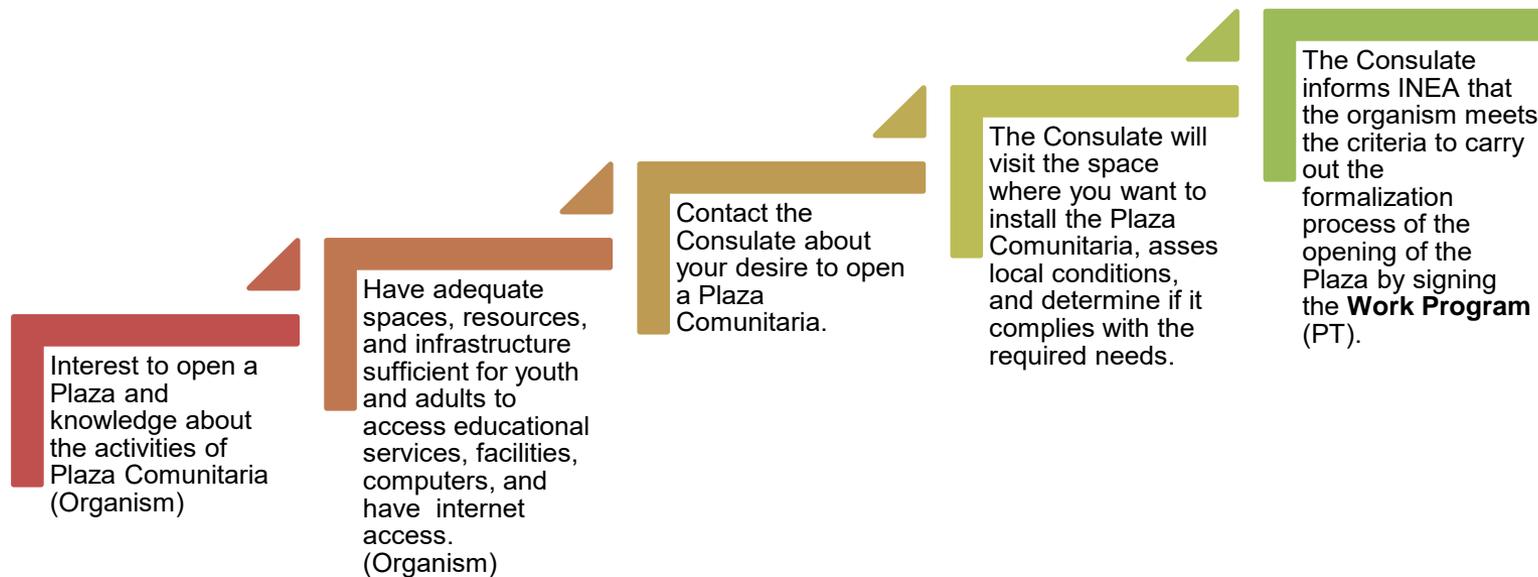
- The target population are Hispanic people over 15 years of age who did not enter or did not conclude their formal education and are either illiterate or have not concluded their primary or secondary education.

Plazas Comunitarias

Educational meeting places which integrate resources and learning, where youth and adults who have not completed their basic education can learn and share experiences, while obtaining their basic education free.

Opening of a Plaza Comunitaria Abroad

- The following process is used to open a Plaza Comunitaria:



Operation of Plazas Comunitarias Abroad

- Once the opening of a Plaza Comunitaria Abroad is formalized, the Institute contacts the person responsible of the Plaza Comunitaria to schedule their initial basic training about INEA and the *Sistema de Acreditación y Seguimiento para Comunidades en el Exterior* (SASACE) through which the advancement of students in the program is registered.
- The Consulate validates the organization who seeks to be a part of the program and supervises that there are no irregularities in the operation of the Plaza Comunitaria.

Personnel and Facilities Required for a Plaza Comunitaria

- A Director to oversee program
- Two teachers to run the educational program
- Employee to run daycare
- A classroom to house educational program
- Daycare Facilities for children

Questions and Answers



BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: March 21, 2018

STUDY SESSION _____
CLOSED SESSION _____
SECTION A-I: PRELIMINARY _____
SECTION A-II: REPORTS _____
SECTION B: HEARINGS X
SECTION C: CONSENT AGENDA _____

Agreement Category:

_____ Academic
_____ Enrichment
_____ Special Education
_____ Support Services
_____ Personnel
_____ Legal
_____ Facilities

SECTION D: ACTION _____

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

Conduct Public Hearing for the Final Environmental Impact Report Prepared for the Doris/Patterson Project (Penanhoat/Fateh/CFW)

The purpose of this Agenda Item is to conduct a public hearing to receive public comments on the District's Final Environmental Impact Report (EIR) for the Doris Avenue/Patterson Road Educational Facilities Project (proposed project). The District proposes to construct and operate joint-use facilities to support a district administrative office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The Board set the date for this public hearing at their March 7, 2018 meeting.

The District retained Tetra Tech to prepare the EIR. The EIR evaluates potential impacts from all phases of project planning, implementation, and operation for the proposed project. The EIR serves as a public disclosure document explaining the effects of the proposed project on the environment, alternatives to the project, and ways to minimize adverse effects and to increase beneficial effects. On December 4, 2017, the District opened a 45-day public review and comment period on the Draft EIR. The public comment period on the Draft EIR closed on January 17, 2018. Comments on the Draft EIR have been incorporated into the Final EIR. The Final EIR document is on the Action section of tonight's agenda for the Board's consideration.

FISCAL IMPACT

None.

RECOMMENDATION

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, and the Director of Facilities, in conjunction with Caldwell Flores Winters, that the Board of Trustees receive public comment on the Final Environmental Impact Report (EIR) prepared for the Doris/Patterson Project.

ADDITIONAL MATERIAL

None.



Marina West Elementary School

2501 Carob Street, Oxnard CA 93035

(805) 385-1554 Fax: (805) 984-549

Principal: Mr. Jorge Mares



Memo

Date: February 27, 2018

To: Dr. Morales, Superintendent

From: Jorge Mares
Principal, Marina West

Re: Donation

In honor of Dr. Seuss' Birthday and our Read Across America Event, the Oxnard Educators Association (OEA) has graciously donated books to the Marina West Library. This has become a tradition for the OEA during our Read Across America and we are extremely grateful for their donation. Their donation will contribute to both our non-fiction and fiction collections in our school library. I respectfully request that the Board of Trustees be notified of this donation.

Thank you,

Jorge Mares

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. Preliminary** _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:**
____ Academic
 Enrichment
____ Special Education
____ Support Services
____ Personnel
____ Legal
____ Facilities
- D. Action Items** _____
F. Board Policies **1st Reading** _____ **2nd Reading** _____

Approval of Agreement #17-275 – Achieve NOW (Freeman/Duran)

Achieve NOW will provide two (2) Family Science Night's at Ramona School on Wednesday, May 23, 2018, to promote their STREAM focus and PBL activities within and outside the classroom. The students will improve their understanding of science principles by completing exciting and interactive hands-on activities. Students will rotate through multiple science lab experiments centered on the Next Generation Science Standards (NGSS).

FISCAL IMPACT:

Total cost not to exceed \$2,498.00 – PTA

RECOMMENDATION:

It is the recommendation of the Principal, Ramona School, and the Assistant Superintendent, Educational Services, that the Board of Trustees approve Agreement #17-275 with Achieve NOW in the amount not to exceed \$2,498.00.

ADDITIONAL MATERIAL(S):

Attached: Agreement #17-275, Achieve Now (13 Pages)
 Invoice/Proposal (1 Page)
 Certificate of Insurance (1 Page)

OXNARD SCHOOL DISTRICT

Agreement #17-275

AGREEMENT FOR CONSULTANT SERVICES

This Agreement for Consultant Services (“Agreement”) is entered into as of this 21st day of March, 2018 by and between the Oxnard School District (“District”) and Achieve NOW (“Consultant”). District and Consultant are sometimes hereinafter individually referred to as “Party” and hereinafter collectively referred to as the “Parties.”

RECITALS

- A. District is authorized by *California Government Code* Section 53060, and Board Policy 4368, to contract with independent contractors for the furnishing of services concerning financial, economic, accounting, engineering, legal, administrative and other matters. District has sought, by issuance of a Request for Proposals or Invitation for Bids, the performance of the Services, as defined and described particularly on Exhibit A, attached to this Agreement.
- B. Following submission of a proposal or bid for the performance of the Services, Consultant was selected by the District to perform the Services.
- C. The Parties desire to formalize the selection of Consultant for performance of the Services and desire that the terms of that performance be as particularly defined and described herein.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the mutual promises and covenants made by the Parties and contained here and other consideration, the value and adequacy of which are hereby acknowledged, the parties agree as follows:

- Incorporation of Recitals and Exhibits.** The Recitals set forth above and all exhibits attached to this Agreement, as hereafter amended, are incorporated by this reference as if fully set forth herein.
- Term of Agreement.** Subject to earlier termination as provided below, this Agreement shall remain in effect from **March 22, 2018** through **May 31, 2018** (the “Term”). This Agreement may be extended only by amendment, signed by the Parties, prior to the expiration of the Term.
- Time for Performance.** The scope of services set forth in Exhibit A shall be completed during the Term pursuant to the schedule specified Exhibit A. Should the scope of services not be completed pursuant to that schedule, the Consultant shall be deemed to be in Default as provided below. The District, in its sole discretion, may choose not to enforce the Default provisions of this Agreement and may instead allow Consultant to continue performing the Services.
- Compensation and Method of Payment.** Subject to any limitations set forth below or elsewhere in this Agreement, District agrees to pay Consultant the amounts specified in Exhibit B “Compensation”. The total compensation, including reimbursement for actual expenses, shall not exceed Two Thousand Four Hundred Ninety-Eight Dollars (\$2,498.00), unless additional compensation is approved in writing by the District.

- a. Each month Consultant shall furnish to District an original invoice for all work performed and expenses incurred during the preceding month. The invoice shall detail charges by the following categories: labor (by sub-category), travel, materials, equipment, supplies, and sub-consultant contracts. Sub-consultant charges, if any, shall be detailed by the following categories: labor, travel, materials, equipment and supplies. District shall independently review each invoice submitted by the Consultant to determine whether the work performed and expenses incurred are in compliance with the provisions of this Agreement. In the event that no charges or expenses are disputed, the invoice shall be approved and paid according to the terms set forth in subsection b. In the event any charges or expenses are disputed by District, the original invoice shall be returned by District to Consultant for correction and resubmission.
- b. Except as to any charges for work performed or expenses incurred by Consultant which are disputed by District, District will use its best efforts to cause Consultant to be paid within forty-five (45) days of receipt of Consultant's correct and undisputed invoice.
- c. Payment to Consultant for work performed pursuant to this Agreement shall not be deemed to waive any defects in work performed by Consultant.

5. **Termination.** This Agreement may be terminated at any time by mutual agreement of the Parties or by either Party as follows:

- a. District may terminate this Agreement, with or without cause, at any time by giving thirty (30) days written notice of termination to Consultant. In the event such notice is given, Consultant shall cease immediately all work in progress; or
- b. Consultant may terminate this Agreement for cause at any time upon thirty (30) days written notice of termination to District.

6. **Inspection and Final Acceptance.** District may, at its discretion, inspect and accept or reject any of Consultant's work under this Agreement, either during performance or when within sixty (60) days after submitted to District. If District does not reject work by a timely written explanation, Consultant's work shall be deemed to have been accepted. District's acceptance shall be conclusive as to such work except with respect to latent defects, fraud and such gross mistakes as amount to fraud. Acceptance of any of Consultant's work by District shall not constitute a waiver of any of the provisions of this Agreement including, but not limited to indemnification and insurance provisions.

7. **Default.** Failure of Consultant to perform any Services or comply with any provisions of this Agreement may constitute a default. The District may give notice to Consultant of the default and the reasons for the default. District shall not have any obligation or duty to continue compensating Consultant for any work performed after the date of the notice until the default is cured. The notice shall include the timeframe in which Consultant may cure the default. This timeframe is presumptively thirty (30) days, but may be extended, though not reduced, at the discretion of the District. During the period of time that Consultant is in default, the District shall hold all invoices and shall, when the default is cured, proceed with payment on the invoices. In the alternative, the District may, in its sole discretion, elect to pay some or all of the outstanding invoices during the period of default. If Consultant does not cure the default, the District may terminate this Agreement as provided above. Any failure on the part of the District to give notice of the Consultant's default shall not be deemed to result in a waiver of the District's legal rights or any rights arising out of any provision of this Agreement.

8. **Ownership of Documents.** All maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files and other documents prepared, developed or discovered by Consultant in the course of providing any services pursuant to this Agreement (collectively and individually, the "Documents") shall

become the sole property of District and may be used, reused or otherwise disposed of by District without the permission of the Consultant. Upon completion, expiration or termination of this Agreement, Consultant shall turn over to District all such Documents.

9. **Use of Documents by District.** If and to the extent that District utilizes for any purpose not related to this Agreement any Documents, Consultant's guarantees and warrants related to Standard of Performance under this Agreement shall not extend to such use of the Documents.

10. **Consultant's Books and Records.** Consultant shall maintain any and all documents and records demonstrating or relating to Consultant's performance of services pursuant to this Agreement for a minimum of three years after termination or expiration of this Agreement, or longer if required by law.

- a. Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, or other documents or records evidencing or relating to work, services, expenditures and disbursements charged to District pursuant to this Agreement for a minimum of three years, or longer if required by law, all in accordance with generally accepted accounting principles and with sufficient detail so as to permit an accurate evaluation of the services provided by Consultant pursuant to this Agreement.
- b. Any and all such records or documents shall be made available for inspection, audit and copying, at any time during regular business hours, upon request by District or its designated representative. Copies of such documents or records shall be provided directly to the District for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed upon, such documents and records shall be made available at Consultant's address indicated for receipt of notices in this Agreement.
- c. District has the right to acquire custody of such records by written request if Consultant decides to dissolve or terminate its business. Consultant shall deliver or cause to be delivered all such records and documents to District within sixty (60) days of receipt of the request.

11. **Independent Contractor.** Consultant is and shall at all times remain a wholly independent contractor and not an officer, employee or agent of District.

- a. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant, its agents or employees shall not at any time or in any manner represent that Consultant or any of Consultant's officers, employees, or agents are in any manner officials, officers, employees or agents of District. Neither Consultant, nor any of Consultant's officers, employees or agents, shall, by virtue of services rendered under this Agreement, obtain any rights to retirement, health care or any other benefits which may otherwise accrue to District's employees. Consultant will be responsible for payment of all Consultant's employees' wages, payroll taxes, employee benefits and any amounts due for federal and state income taxes and Social Security taxes since these taxes will not be withheld from payment under this agreement.
- b. Consultant shall have no authority to bind District in any manner, or to incur any obligation, debt or liability of any kind on behalf of or against District, whether by contract or otherwise, unless such authority is expressly conferred in writing by District, or under this Agreement.

12. **Standard of Performance.** Consultant represents and warrants that it has the qualifications, experience and facilities necessary to properly perform the services required under this Agreement in a thorough, competent and professional manner. Consultant shall at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described herein. In meeting its obligations under this Agreement,

Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement.

13. **Confidential Information.** All information gained during performance of the Services and all Documents or other work product produced by Consultant in performance of this Agreement shall be considered confidential. Consultant shall not release or disclose any such information, Documents or work product to persons or entities other than District without prior written authorization from the Superintendent of the District, except as may be required by law.

- a. Consultant shall promptly notify District if it is served with any summons, complaint, subpoena or other discovery request, court order or other request from any party regarding this Agreement or the work performed hereunder.
- b. District retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with District and to provide District with the opportunity to review any response to discovery requests provided by Consultant; provided that this does not imply or mean the right by District to control, direct, or rewrite said response.

14. **Conflict of Interest; Disclosure of Interest.** Consultant covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, which would conflict in any manner with the interests of District or which would in any way hinder Consultant’s performance of services under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor without the express written consent of the District.

- a. Consultant agrees to at all times avoid conflicts of interest or the appearance of any conflicts of interest with the interests of District in the performance of this Agreement.
- b. Bylaws of the Board 9270 BB and 9270(BB) E, as hereinafter amended or renumbered, require that a Consultant that qualifies as a “designated employee” must disclose certain financial interests by filing financial interest disclosures. By its initials below, Consultant represents that it has received and reviewed a copy of the Bylaws of the Board 9270 BB and 9270(BB) E and that it does does not qualify as a “designated employee”.

_____ (Initials)

- c. Consultant agrees to notify the Superintendent, in writing, if Consultant believes that it is a “designate employee” and should be filing financial interest disclosures, but has not been required to do so by the District.

_____ (Initials)

15. **Compliance with Applicable Laws.** In connection with the Services and its operations, Consultant shall keep itself informed of and comply with all applicable federal, state and local laws, statutes, codes, ordinances, regulations and rules including, but not limited to, minimum wages and/or prohibitions against discrimination, in effect during the Term. Consultant shall obtain any and all licenses, permits and authorizations necessary to perform the Services. Neither District, nor any elected or appointed boards, officers, officials, employees or agents of District shall be liable, at law or in equity, as a result of any failure of Consultant to comply with this section.

- a. Without limiting the generality of the foregoing, Consultant shall comply with any applicable fingerprinting requirements as set forth in the Education Code of the State of California.

_____ (Initials)

16. **Unauthorized Aliens.** Consultant hereby promises and agrees to comply with all of the provisions of the Federal Immigration and Nationality Act, 8 U.S.C.A. §§ 1101, et seq., as amended, and in connection therewith, shall not employ “unauthorized aliens” as that term is defined in 8 U.S.C.A. §1324a(h)(3). Should Consultant so employ such individuals for the performance of work and/or services covered by this Agreement, and should any liability or sanctions be imposed against District for such employment, Consultant hereby agrees to and shall reimburse District for the cost of all such liabilities or sanctions imposed, together with any and all costs, including attorneys' fees, incurred by District.

17. **Non-Discrimination.** Consultant shall abide by the applicable provisions of the United States Civil Rights Act of 1964 and other provisions of law prohibiting discrimination and shall not discriminate, in any way, against any person on the basis of race, color, religious creed, national origin, ancestry, sex, age, physical handicap, medical condition or marital status in connection with or related to the performance of this Agreement.

18. **Assignment.** The expertise and experience of Consultant are material considerations for this Agreement. District has an interest in the qualifications of and capability of the persons and entities that will fulfill the duties and obligations imposed upon Consultant under this Agreement. In recognition of that interest, Consultant shall not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Consultant’s duties or obligations under this Agreement without the prior written consent of the Board of Directors of the District. Any attempted assignment shall be ineffective, null and void, and shall constitute a material breach of this Agreement entitling District to any and all remedies at law or in equity, including summary termination of this Agreement.

19. **Subcontracting.** Notwithstanding the above, Consultant may utilize subcontractors in the performance of its duties pursuant to this Agreement, but only with the prior written consent of the District. The Consultant shall be as fully responsible to the District for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by him/her, as if the acts and omissions were performed by him/her directly.

20. **Continuity of Personnel.** Consultant shall make every reasonable effort to maintain the stability and continuity of Consultant’s staff and subcontractors, if any, assigned to perform the services required under this Agreement.

- a. Consultant shall insure that District has a current list of all personnel and sub-contractors providing services under this Agreement.
- b. Consultant shall notify District of any changes in Consultant’s staff and subcontractors, if any, assigned to perform the services required under this Agreement, prior to and during any such performance. The list notice shall include the following information: (1) all full or part-time staff positions by title, including volunteer positions whose direct services are required to provide the services described herein; (2) a brief description of the functions of each such position and the hours each position works each week or, for part-time positions, each day or month, as appropriate; (3) the professional degree, if applicable, and experience required for each position; and (4) the name of the person responsible for fulfilling the terms of this Agreement.

21. **Indemnification.**

- a. Consultant agrees to defend, indemnify, and hold harmless District, its officers, agents, employees, and/or volunteers from any and all claims, demands, losses, damages and expenses, including legal fees and costs, or other obligations or claims arising out of any liability or damage to property, or any other loss, sustained or claimed to have been sustained arising out of activities of the Consultant or those of any of Consultant’s officers, agents, employees, or subcontractors, whether such act or omission is authorized by this Agreement or not. Consultant shall also pay for any and all damage to the Property of the District, or loss or theft of such Property, done or caused by such persons. District

assumes no responsibility whatsoever for any property placed on district premises. Consultant further agrees to waive all rights of subrogation against the District. The provisions of this Agreement do not apply to any damage or losses caused solely by the negligence of the District or any of its officers, agents, employees, and/or volunteers.

_____ (Initials)

- b. The provisions of this section do not apply to claims occurring as a result of District's sole negligence or willful acts or omissions.

22. **Insurance.** Consultant agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance policies set forth in **Exhibit C** "Insurance" and made a part of this Agreement. All insurance policies shall be subject to approval by District as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the District Superintendent. Consultant agrees to provide District with copies of required policies upon request.

23. **Notices.** All notices required or permitted to be given under this Agreement shall be in writing and shall be personally delivered, or sent by telecopier or certified mail, postage prepaid and return receipt requested, addressed as follows:

To District: Oxnard School District
1051 South A Street
Oxnard, California, 93030
Attention: Dr. Andres Duran
Phone: (805) 385.1569
Fax: (805) 486.7049

To Consultant: Achieve NOW
12703 Oakthorn Lane
La Mirada, CA 90638
Attention: Rich Blagden
Phone: (562) 713.5000
Fax:

Notice shall be deemed effective on the date personally delivered or transmitted by facsimile (provided confirmation of successful facsimile transmission shall be retained) or, if mailed, three (3) days after deposit of the same in the custody of the United States Postal Service.

24. **Excusable Delays.** Consultant shall not be liable for damages, including liquidated damages, if any, caused by delay in performance or failure to perform due to causes beyond the control of Consultant. Such causes include, but are not limited to, acts of God, acts of the public enemy, acts of federal, state or local governments, acts of District, court orders, fires, floods, epidemics, strikes, embargoes, and unusually severe weather. The term and price of this Agreement shall be equitably adjusted for any delays due to such causes.

25. **Authority to Execute.** The person or persons executing this Agreement on behalf of Consultant represents and warrants that he/she/they has/have the authority to so execute this Agreement and to bind Consultant to the performance of its obligations hereunder.

26. **Administration.** DR. ANDRES DURAN shall be in charge of administering this Agreement on behalf of the District. The Director of Purchasing has completed **Exhibit D** "Conflict of Interest Check" attached hereto.

27. **Binding Effect.** This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties.
28. **Entire Agreement.** This Agreement and the exhibits and documents incorporated herein constitute the entire agreement and understanding between the parties in connection with the matters covered herein.
29. **Amendment.** No amendment to or modification of this Agreement shall be valid or binding unless made in writing by the Consultant and by the District. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver shall be void.
30. **Waiver.** Waiver by any party to this Agreement of any term, condition, or covenant of this Agreement shall not constitute a waiver of any other term, condition, or covenant. Waiver by any party of any breach of the provisions of this Agreement shall not constitute a waiver of any other provision or a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by District of any work or services by Consultant shall not constitute a waiver of any of the provisions of this Agreement.
31. **Governing Law.** This Agreement shall be interpreted, construed and governed according to the laws of the State of California. In the event of litigation between the parties, venue in state trial courts shall lie exclusively in the County of Ventura, California.
32. **Arbitration.** Any dispute arising out of the performance of this Agreement shall be resolved by binding arbitration in accordance with rules and procedures of the American Arbitration Association.
33. **Severability.** If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall not be affected thereby and the Agreement shall be read and construed without the invalid, void or unenforceable provision(s).

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the District and Consultant have executed and delivered this agreement for consultant services as of the date first written above.

OXNARD SCHOOL DISTRICT:

ACHIEVE NOW:

Signature

Signature

Lisa A. Franz, Director, Purchasing
Typed Name/Title

Typed Name/Title

Date

Date

Tax Identification Number: 95-6002318

Tax Identification Number: _____

- Not Project Related
- Project #17-275

EXHIBIT A
TO AGREEMENT FOR CONSULTANT SERVICES #17-275

SERVICES

I. Consultant will perform the following Services under the Captioned Agreement:

***SEE ATTACHED PROPOSAL**

II. As part of the Services, Consultant will prepare and deliver the following tangible work products to the District:

***SEE ATTACHED PROPOSAL**

III. During performance of the Services, Consultant will keep the District appraised of the status of performance by delivering the following status reports under the indicated schedule:

STATUS REPORT FOR ACTIVITY:	DUE DATE
A. N/A	
B.	
C.	
D.	

V. Consultant will utilize the following personnel to accomplish the Services:

- None.
- See attached list.

VI. Consultant will utilize the following subcontractors to accomplish the Services (check one):

- None.
- See attached list.

VII. AMENDMENT

The Scope of Services, including services, work product, and personnel, are subject to change by mutual Agreement. In the absence of mutual Agreement regarding the need to change any aspects of performance, Consultant shall comply with the Scope of Services as indicated above

- Not Project Related
 Project #17-275

EXHIBIT B
TO AGREEMENT FOR CONSULTANT SERVICES #17-275

COMPENSATION

I. Consultant shall use the following rates of pay in the performance of the Services:

**TOTAL FEE NOT TO EXCEED \$2,498.00

II. Consultant may utilize subcontractors as indicated in this Agreement. The hourly rate for any subcontractor is not to exceed \$ N/A per hour without written authorization from the District Superintendent or his designee.

III. The District will compensate Consultant for the Services performed upon submission of a valid invoice. Each invoice is to include:

- A. Line items for all personnel describing the work performed, the number of hours worked, and the Hourly or flat rate.
- B. Line items for all supplies properly charged to the Services.
- C. Line items for all travel properly charged to the Services.
- D. Line items for all equipment properly charged to the Services.
- E. Line items for all materials properly charged to the Services.
- F. Line items for all subcontractor labor, supplies, equipment, materials, and travel properly charged to the Services.

IV. The total compensation for the Services shall not exceed \$2,498.00, as provided in Section 4 of this Agreement.

EXHIBIT C
TO AGREEMENT FOR CONSULTANT SERVICES #17-275

INSURANCE

I. **Insurance Requirements.** Consultant shall provide and maintain insurance, acceptable to the District Superintendent or District Counsel, in full force and effect throughout the term of this Agreement, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by Consultant, its agents, representatives or employees. Insurance is to be placed with insurers authorized to conduct business in the State of California and with a current A.M. Best's rating of no less than A, as rated by the Current edition of Best's Key Rating Guide, published by A.M. Best Company, Oldwick, New Jersey 08858. Consultant shall provide the following scope and limits of insurance:

A. **Minimum Scope of Insurance.** Coverage shall be at least as broad as:

(1) Commercial General Liability coverage of not less than two million dollars (\$2,000,000) Aggregate and one million dollars (\$1,000,000) per occurrence.

(2) Auto liability insurance with limits of not less than one million dollars (\$1,000,000).

(3) Insurance coverage should include:

1. owned, non-owned and hired vehicles;
2. blanket contractual;
3. broad form property damage;
4. products/completed operations; and
5. personal injury.

(4) Workers' Compensation insurance as required by the laws of the State of California.

~~(5) Abuse and Molestation coverage of not less than two million dollars (\$2,000,000) per occurrence and five million dollars (\$5,000,000) Aggregate.~~

(6) Professional liability (Errors and Omissions) insurance, including contractual liability, as appropriate to the Consultant's profession, in an amount of not less than the following:

Accountants, Attorneys, Education Consultants, Nurses, Therapists	\$1,000,000
Architects	\$1,000,000 or \$2,000,000
Physicians and Medical Corporations	\$5,000,000

Failure to maintain professional liability insurance is a material breach of this Agreement and grounds for immediate termination

II. **Other Provisions.** Insurance policies required by this Agreement shall contain the following provisions:

A. **All Policies.** Each insurance policy required by this Agreement shall be endorsed and state the coverage shall not be suspended, voided, cancelled by the insurer or either party to this Agreement, reduced in

Not Project Related

Project #17-275

coverage or in limits except after 30 days' prior written notice by Certified mail, return receipt requested, has been given to District

B. General Liability, Automobile Liability, and Abuse/Molestation Coverages.

(1) District, and its respective elected and appointed officers, officials, employees and volunteers are to be covered as additional insureds (collectively, "additional insureds") as respects the following: liability arising out of activities Consultant performs; products and completed operations of Consultant; premises owned, occupied or used by Consultant ; automobiles owned, leased, hired or borrowed by Consultant, ~~and Abuse/Molestation~~. The coverage shall contain no special limitations on the scope of protection afforded to additional insureds.

(2) Each policy shall state that the coverage provided is primary and any insurance carried by any additional insured is in excess to and non-contributory with Consultant's insurance.

(3) Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(4) Any failure to comply with the reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to any additional insured.

III. Other Requirements. Consultant agrees to deposit with District, at or before the effective date of this contract, certificates of insurance necessary to satisfy District that the insurance provisions of this contract have been complied with. The District may require that Consultant furnish District with copies of original endorsements effecting coverage required by this Section. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. District reserves the right to inspect complete, certified copies of all required insurance policies, at any time.

A. If any Services are performed by subcontractor, Consultant shall furnish certificates and endorsements from each subcontractor identical to those Consultant provides.

B. Any deductibles or self-insured retentions must be declared to and approved by District. At the option of District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects District or its respective elected or appointed officers, officials, employees and volunteers or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration, defense expenses and claims.

C. The procuring of any required policy or policies of insurance shall not be construed to limit Consultant's liability hereunder nor to fulfill the indemnification provisions and requirements of this Agreement.

Not Project Related

Project #17-275

EXHIBIT D
TO AGREEMENT FOR CONSULTANT SERVICES #17-275

CONFLICT OF INTEREST CHECK

Bylaws of the Board 9270(BB)E requires that the Superintendent or a designee make a determination, on a case by case basis, concerning whether disclosure will be required from a consultant to comply with the District's Conflict of Interest Code (commencing with Bylaws of the Board 9270 BB).

Consultant's are required to file disclosures when, pursuant to a contract with the District, the Consultant will make certain specified government decisions or will perform the same or substantially the same duties for the District as a staff person would.

The services to be performed by Consultant under the Agreement to which this Exhibit D is attached constitute do not constitute governmental decisions or staff services within the meaning of the Conflict of Interest Code. Therefore, the Consultant, **ACHIEVE NOW**, who will provide Services under the Agreement, is is not subject to disclosure obligations.

Date: _____

By: _____

Lisa A. Franz
Director, Purchasing

Achieve Now[®]

Achieve Science

Powered by STEM

I N V O I C E

Ramona Elementary School
 804 Cooper Road
 Oxnard, CA 93030
 (805) 385-1569
 Melanie Morrow, Instructional Coach -TOSA
 mmorrow@oxnardsd.org

Please make check payable to: *Achieve Now*

Date	Invoice Order	Consultant	Terms	Federal I.D.
Jan. 18, 2018	18-0523	Rich Blagden	COD	20-5069756

Quantity	Item	Description	List	Total
2	Family Science	"Family Science Night" - 45 minutes	\$3,900	\$2,498
		Wednesday, May 23, 2018		
		Times to be determined		
		No deposit required - No recording devices		
		Balance due at conclusion of event		
			Subtotal	\$2,498
			Balance	\$2,498

[Thank you](#) for reserving one of our science programs!

We look forward to visiting
 Ramona Elementary School!



CERTIFICATE OF LIABILITY INSURANCE

JDR
R022DATE (MM/DD/YYYY)
1/19/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		CONTACT NAME:	
AUTO CLUB INSURANCE AGENCY LLC/PHS		PHONE (A/C, No, Ext): (866) 467-8730	FAX (A/C, No): (888) 443-6112
253682 P:(866) 467-8730 F:(888) 443-6112		E-MAIL ADDRESS:	
PO BOX 33015		INSURER(S) AFFORDING COVERAGE	
SAN ANTONIO TX 78265		INSURER A: Sentinel Ins Co LTD	
		NAIC# 11000	
INSURED		INSURER B:	
RICH BLAGDEN DBA ACHIEVE NOW		INSURER C:	
12703 OAKTHORN LN		INSURER D:	
LA MIRADA CA 90638		INSURER E:	
		INSURER F:	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR HYD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	COMMERCIAL GENERAL LIABILITY			72 SBM AH8018	01/27/2018	01/27/2019	EACH OCCURRENCE \$2,000,000	
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000	
	<input checked="" type="checkbox"/> General Liab	X					MED EXP (Any one person) \$10,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:							PERSONAL & ADV INJURY \$2,000,000
	<input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/> LOC						GENERAL AGGREGATE \$4,000,000	
	OTHER:						PRODUCTS - COMP/OP AGG \$4,000,000	
							\$	
A	AUTOMOBILE LIABILITY			72 SBM AH8018	01/27/2018	01/27/2019	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000	
	<input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY		X				BODILY INJURY (Per person) \$	
	<input checked="" type="checkbox"/> HIRED AUTOS ONLY	X					BODILY INJURY (Per accident) \$	
							PROPERTY DAMAGE (Per accident) \$	
							\$	
	UMBRELLA LIAB						EACH OCCURRENCE \$	
	EXCESS LIAB						AGGREGATE \$	
	DED	RETENTION \$					\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/>		N/A				OTH-ER	
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. EACH ACCIDENT \$	
							E.L. DISEASE- EA EMPLOYEE \$	
							E.L. DISEASE - POLICY LIMIT \$	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Those usual to the Insured's Operations. Certificate holder is an additional insured per the Business Liability Coverage Form SS0008 attached to this policy.

CERTIFICATE HOLDER**CANCELLATION**

OXNARD SCHOOL DISTRICT 1051 S A ST OXNARD, CA 93030	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <i>Susan L. Castaneda</i>
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OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. Preliminary** _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:**
____ Academic
 Enrichment
____ Special Education
____ Support Services
____ Personnel
____ Legal
____ Facilities
- D. Action Items** _____
F. Board Policies **1st Reading** _____ **2nd Reading** _____

Approval of Agreement #17-278, Carson Entertainment (Freeman/Thomas)

Carson Entertainment will be compensated to provide a magic show for the students in the after school program on Wednesday, April 11, 2018. The show is designed as an enrichment activity for the students. The show will be performed at the Oxnard Performing Arts Center. Carson Entertainment will be donating the second performance to the Oxnard School District to be used as a fundraiser.

FISCAL IMPACT:

Not to exceed \$4,000.00 – ASES

RECOMMENDATION:

It is the recommendation of the Director, Curriculum, Instruction & Accountability, and the Assistant Superintendent, Educational Services, that the Board of Trustees approve Agreement #17-278 with Carson Entertainment.

ADDITIONAL MATERIAL(S):

Attached: Agreement #17-278, Carson Entertainment (2 Pages)
 Certificate of Insurance (4 Pages)

Carson Entertainment

AGREEMENT #17-278

This agreement between CARSON ENTERTAINMENT and Oxnard School District, to exhibit illusion stage show: Magical Mystery Show in the City or County of Oxnard, CA on the following date(s) Wednesday, April 11, 2018 showing at 4PM and 7PM under the auspices of our organization.

The terms of this agreement to be as follows:

1. CARSON ENTERTAINMENT agrees to furnish the following under control of CARSON ENTERTAINMENT.
 - A. A one-hour and fifteen-minute stage show plus a fifteen-minute intermission.
 - B. All acts, performers including salaries.
 - C. All transportation costs for the show and crew.
 - D. All publicity material and press kit needed for newspapers, radio, etc.
 - E. Oxnard School District will issue CARSON ENTERTAINMENT a check for the amount of \$4,000 on the day of the contracted stage show. The \$4,000 covers the cost of the first show for the students in the after school program. The second show is donated to Oxnard School District by Carson Entertainment.
 - F. A complete settlement will be made with CARSON ENTERTAINMENT two hours before the show, at which time Oxnard School District will pay CARSON ENTERTAINMENT in full as per this agreement.
2. Sponsor agrees to furnish with out cost to CARSON ENTERTAINMENT.
 - A. Location for the show, known as Oxnard Performing Arts Center (Stage must be completely cleared. No props, etc.)
 - B. An experienced light tech from the school drama department / theater, if the show is not held in a gymnasium.
 - C. If Show program is printed, there is **NO** promotional photos to be printed on or with in the program of any show performers and Carson Entertainment must be listed on cover of program.
3. CARSON ENTERTAINMENT will donate one performance that will be used as a matching fund for the After School Education and Safety (ASES) funded after school program in Oxnard School District.
4. CARSON ENTERTAINMENT shall not be responsible or liable in the fulfillment of this agreement, for mechanical difficulties arising from transportation of its equipment, of personnel, nor from labor disputes, strikes, acts of God, Public enemies, mobs or riots.
5. CARSON ENTERTAINMENT is responsible for all tax related issues on the fee paid for their services.
6. CARSON ENTERTAINMENT has joint rights with Oxnard School District.
7. CARSON ENTERTAINMENT agrees that the Oxnard School District is not liable for any obligations contracted by the show or its staff. In addition Carson Entertainment agrees to hold harmless and indemnify Oxnard School District, its officers, board members, employees and volunteers for any an all liabilities resulting from the services provided by

Carson Entertainment under this agreement. ****Carson Entertainment does carry a \$3 million liability insurance policy and **will provide** a certificate of insurance naming your Oxnard School District or venue as an additional insured in the amount of \$3 million for general liability insurance.

8. If show is canceled by the club/organization after all promotional materials have been printed and sent, the club/organization will be responsible for all fees involved, (maximum \$300.00 to be reimbursed to CARSON ENTERTAINMENT, Net 30 days.

Given under hand and seal this _____ day of March, 2018.

CARSON ENTERTAINMENT
5100 Elvis Presley Court Estates
Las Vegas, NV 89131
702/645-3298 phone or fax
702/498-3298 cell
GarryCarson@ymail.com

Garry Carson

Garry Carson, Carson Entertainment.com

Oxnard School District
Sponsor

X
Signature

1051 South A Street
Street address

Oxnard, CA 93030
City / State / Zip

805-385-1501
Phone

Ginger Shea
Sponsor contact

X N/A
Signature

N/A
Home phone

N/A
Other phone

lfranz@oxnardsd.org
E-mail Address



EVANSTON INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED

This endorsement modifies insurance provided under the following

- COMMERCIAL GENERAL LIABILITY COVERAGE FORM
- PRODUCTS/COMPLETED OPERATIONS COVERAGE FORM
- LIQUOR LIABILITY COVERAGE FORM
- PROFESSIONAL LIABILITY COVERAGE FORM

Please refer to each coverage form to determine which terms are defined. Words shown in quotations on this endorsement may or may not be defined in all coverage forms.

SCHEDULE

Person or Entity: Any person or organization to whom you are obligated by valid written contract to provide such coverage.

Additional Premium: \$ (Check box if fully earned.)
Included

WHO IS AN INSURED is amended to include the person or entity shown in the Schedule above as an Additional Insured under this insurance, but only as respects negligent acts or omissions of the Named Insured and only as respects any coverage not otherwise excluded in the policy. Our agreement to accept an Additional Insured provision in a contract is not an acceptance of any other provisions of the contract or the contract in total.

When coverage does not apply for the Named Insured, no coverage or defense shall be afforded to the Additional Insured.

No coverage shall be afforded to the Additional Insured for injury or damage of any type to any "employee" of the Named Insured or to any obligation of the Additional Insured to indemnify another because of damages arising out of such injury or damage.

All other terms and conditions remain unchanged.



EVANSTON INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.)

BLANKET WAIVER OF SUBROGATION

This endorsement modifies insurance provided under the following:)))))

COMMERCIAL GENERAL LIABILITY COVERAGE FORM)

SCHEDULE

Additional Premium: \$0)

Name of Person or Organization: Any person(s) or organization(s) to whom the Named Insured agrees to waive rights of recovery in a written contract.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section IV – COMMERCIAL GENERAL LIABILITY CONDITIONS) is amended by the addition of the following:)

We waive any right of recovery we may have against the person or organization shown in the Schedule above as respects written contracts that exist between you and such person or entity, provided you have agreed in writing to furnish this waiver. This waiver applies only to the person or organization shown in the Schedule above.)

All other terms and conditions remain unchanged.)

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. Preliminary** _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:**
____ Academic
X **Enrichment**
____ **Special Education**
____ **Support Services**
____ **Personnel**
____ **Legal**
____ **Facilities**
- D. Action Items** _____
F. Board Policies 1st Reading _____ 2nd Reading _____

Approval of Agreement #17-279 – Oxnard Performing Arts Center (Freeman/Thomas)

This agreement is for the rental of the Oxnard Performing Arts Center (OPAC) on Wednesday, April 11, 2018 to hold the Magic Show with Garry Carson for students in the after school program.

FISCAL IMPACT:

Not to Exceed \$3,327.25 – ASES Grant

RECOMMENDATION:

It is the recommendation of the Director, Curriculum, Instruction & Accountability, and the Assistant Superintendent, Educational Services, that the Board of Trustees approve Agreement #17-279 with the Oxnard Performing Arts Center.

ADDITIONAL MATERIALS:

Attached: Agreement #17-279, Oxnard Performing Arts Center (12 Pages)

PERFORMING ARTS AND CONVENTION CENTER
LICENSE AGREEMENT - THEATER

This Performing Arts and Convention Center License Agreement ("Agreement") is made and entered into in the County of Ventura, State of California, this 21st day of March 2018, by and between the Oxnard Performing Arts Center Corporation, a nonprofit corporation, ("PACC"), and "Oxnard School District", ("Licensee").

WHEREAS, PACC operates and maintains the Oxnard Performing Arts and Convention Center for use by various organizations, entities and persons for conventions, trade shows, exhibitions, theatrical performances, meetings, concerts, and similar activities; and

WHEREAS, PACC hereby desires to make the Oxnard Performing Arts and Convention Center Theater available to Licensee for a license fee.

NOW, THEREFORE, PACC and Licensee agree as follows:

1. Facilities Provided

a. PACC hereby authorizes Licensee to use the Oxnard Performing Arts and Convention Center Theater ("Theater") as more particularly LOCATED AT 800 Hobson Way, Oxnard, California 93030.

b. PACC agrees to provide Licensee with standard furnishings and equipment including heating, air conditioning, general lighting, use of the stage, dressing rooms and orchestra pit.

c. PACC agrees to provide Theater for Licensee's use including the following services: Necessary custodial services, utilities, general supervision by Stage Manager, one public address set-up with three microphones, and one lighting set-up.

d. PACC agrees to provide Licensee with the following special equipment/supplies and personnel:

(1) Equipment/Supplies	
(a) Stage Lighting	\$ <u>330.00</u>
(b) House Sound System	<u>0.00</u>
(c) Lycian #1279 2.5K Followspot	<u>65.00</u>
(2) Personnel	
(a) Stage Technicians	\$ <u>1,417.25</u>
(b) House Manager	<u>200.00</u>
(c) 2 Ushers	<u>140.00</u>
(d) Box Office	<u>N/A</u>

2. Coordination of Use

All uses of Theater are to be coordinated with the PACC Executive Director or designee ("Executive Director") and shall be under the general direction of Executive Director.

3. License Period

PACC agrees that Licensee may use the entire complex on the following dates, during the hours specified below:

Moving In: Wednesday, April 11, 2018, 11:00 am

Moving Out: Wednesday, April 11, 2018, 9:30 pm

Programs: Wednesday, April 11, 2018, 4:00 pm and 7:00 pm

4. Reservation Fee

Licensee agrees to pay PACC a non-refundable reservation fee in the amount of \$ _____ to Executive Director. The PACC shall credit the reservation fee toward payment of other fees and charges owed by Licensee.

5. License Fee

a. Licensee agrees to pay PACC the following fees for the use of Theater and the use of any special equipment/supplies and personnel:

(1) License Fee	\$ <u>1,150.00</u>
(2) Equipment/Supplies	<u>395.00</u>
(3) Personnel	<u>1,757.25</u>
(4) Insurance	<u>N/A</u>
(5) Non-Refundable Processing Fee	<u>25.00</u>
TOTAL	<u>\$3,327.25</u>

b. Licensee agrees to pay any addendum charges for additional services or equipment related to Licensee's use of the Theater. An estimate of any addendum charges is attached hereto as Exhibit A and incorporated herein by this reference. The actual addendum charges will be determined after the PACC has actually provided the services or equipment.

6. Gross Receipts Fees

If the license fee is based on gross receipts, gross receipts shall mean the total sums,

exclusive of taxes, collected from patrons by Licensee.

7. No Free Passes

Licensee may not issue free passes or admissions to Licensee's event without the written consent of Executive Director.

8. Maintenance of Records

Licensee shall maintain true and accurate records of receipts of admissions and concession sales, if any, and shall satisfactorily and thoroughly account for the receipt thereof. Executive Director shall have the right to inspect such records.

9. Proposed Event

The event to be presented by Licensee shall consist of "**Garry Carson Magic Show**". Licensee's use of Theater shall be limited to the event as described herein.

10. Fee for Admission

a. PACC agrees that Licensee may charge admission during the proposed use of Theater by Licensee.

b. (1) Licensee agrees to include in the price of admission to Theater a Facility Restoration Fee of \$1.00 per ticket for tickets priced \$10.00 to \$19.99, \$2.00 per ticket for tickets priced \$20.00 to \$39.99, and \$3.00 per ticket priced \$40.00 and more. The Facility Restoration Fee is for the exclusive benefit of the PACC Facility Restoration Fund.

(2) All advertising for Licensee's event at Theater shall include the following statement: "A Facility Restoration Fee shall be added to each ticket."

(3) Licensee agrees, that for general admission events without tickets for sale, Licensee shall pay a \$.50 per admission Facility Restoration Fee as an addendum charge.

11. Removal of Property

a. Licensee agrees to remove from Theater, on or before **8:00 am** on the **12th** day of **April 2018**, all property, goods, equipment, supplies and effects belonging to Licensee or caused by Licensee to be brought to Theater.

b. If any such property is not removed by the above stated time, Licensee authorizes Executive Director to sell the property in any manner Executive Director deems appropriate and to hold the proceeds from the sale for Licensee, less any costs incurred by PACC.

c. Executive Director may, in his or her sole discretion, store, or cause to be

stored, any such property not removed by the above stated time. Licensee agrees to pay PACC all costs associated with such storage.

12. PACC Not Liable For Licensee's Property

In the receipt, handling, care or custody of property of any kind shipped or otherwise delivered to Theater either prior to, during, or subsequent to the use of Theater by Licensee, PACC and its officers, agents and employees shall act solely for the accommodations of Licensee; and neither PACC nor its officers, agents or employees shall be liable for any loss, damage or injury to such property.

13. Handling of Funds

a. In the handling, control, custody and keeping of funds whether the funds are received through the PACC box office or otherwise, Licensee agrees that PACC is acting for the accommodation of Licensee, and as to such funds PACC shall not be liable to Licensee or to any other person for any loss, theft or defalcation thereof, whether such loss, theft, or defalcation is caused or done by officers, employees or agents of the PACC.

b. No PACC officer, employee or agent shall be liable for any loss, theft or defalcation of such funds unless PACC willfully causes or permits the same or unless the loss, theft or defalcation was caused by the gross negligence of an officer, employee or agent of PACC.

14. Prop Entrance

Licensee shall bring all prop articles, fixtures, materials, displays into or out of Theater only at such entrances as may be designated by Executive Director.

15. Care of Theater

Licensee will not drive any nails, screws, tacks, pins, or other objects into the floors, walls, ceilings, partitions, doors, door or window casings, or woodwork of Theater and will not in any manner change or move any of the fixtures of Theater except as may be authorized by Executive Director.

16. Electrical Work and Plans

Licensee shall file with Executive Director a description of all electrical work and a plan or description of any structures, or decorations to be erected for the event. Licensee will not construct or erect such electrical work, structures, or decorations without prior written approval by Executive Director.

17. Animals Prohibited

Licensee agrees that no domestic or wild animals or birds shall be taken into, or

kept in or about Theater, or any part thereof, without the written consent of Executive Director.

18. Signs Require Permission

Licensee agrees that no signs or advertisements shall be placed in, on, or about Theater without the consent of Executive Director.

19. Televising Requires Permission

No event presented in Theater shall be broadcast, televised, or in any manner recorded for reproduction without the written consent of Executive Director.

20. Conduct of Persons

a. Licensee agrees to comply with all ordinances, statutes, rules and regulations applicable to the conduct or operation of the activities of Licensee herein permitted. Licensee shall provide adequate security protection to maintain order in and about Theater.

b. Licensee shall be solely responsible for the orderly conduct of all persons using Theater by invitation, either expressed or implied, during all times covered by this Agreement.

c. Licensee shall not permit intoxicated persons or alcoholic beverages at Theater by invitation, either expressed or implied, during all times covered by this Agreement.

d. PACC reserves the right to eject or cause to be ejected from Theater any person making loud, personal, impertinent, profane or slanderous remarks so as to disrupt an event at Theater.

21. Control of Theater

a. The keys to Theater shall at all times be in the possession and control of Executive Director. PACC shall lock and unlock the entrance and exits of Theater at such times as may be required for Licensee's use. Licensee, at its own expense, must at all times place proper security at all entrances and exits when the same are unlocked.

b. PACC and all duly authorized representatives of PACC shall have the right to enter Theater and all parts thereof at all times.

22. Lost Articles

PACC or its representatives shall have the sole right to collect and have the custody of articles left in Theater by persons attending any event. Licensee or any person in Licensee's employ shall not collect nor interfere with the collection or custody of such articles.

23. Flammable Materials

Licensee may not use flammable materials such as bunting, tissue paper, crepe paper, for decorations. All materials used for decorative purposes must be treated with flame proofing and approved by the Fire Marshall.

24. Entertainment Standards

Licensee shall not conduct any event in Theater and Complex that is illegal or obscene.

25. Concession Sales by PACC

PACC reserves the sole right:

a. To contract for the sale of programs, librettos, periodicals, books, magazines, newspapers, soft drinks, flowers, tobacco, candies, food, novelties or any related merchandise commonly sold or dispensed in Theater and Complex; opera glasses, cushions, and other articles; and photographs.

b. To operate the parking lots, and check rooms; provided, however, that Executive Director may, in writing, authorize Licensee to do any of the aforesaid upon such terms as Executive Director deems proper under the circumstances, subject to the provisions of any existing contracts.

26. Sales by Licensee

a. Licensee may sell from the Theater only those items approved in writing by Executive Director. Licensee shall provide Executive Director with an accounting of such sales and shall pay PACC fifteen percent (15%) of the gross amount of sales, exclusive of sales tax.

b. Licensee shall not serve food or beverages for the event except by agreement with caterers approved by Executive Director.

27. Use of PACC Box Office

Licensee agrees that PACC shall be responsible for ordering and selling tickets sold at the PACC box office at fees so designated on the Box Office Agreement attached hereto as Exhibit B. If a computerized ticket system is used, Licensee agrees to use PACC's designated ticket agency.

28. Complimentary Tickets

a. Licensee agrees not to issue more than fifty (50) complimentary tickets to the Licensee's event without the written consent of Executive Director.

29. Copyright

Licensee agrees to assume all costs and obligations arising from the use of patented and/or copyrighted materials, equipment, devices, processes or dramatic rights furnished or used or incorporated in the event. Licensee agrees to obtain and pay for all appropriate BMI, ASCAP, and SESAC licenses for the event.

30. Assignment

Licensee shall not assign this Agreement in whole or in part, nor may any right hereunder granted to Licensee be granted in turn to any other person without the written consent of Executive Director.

31. Occupancy Interruption

a. In case Theater or any part thereof shall be destroyed or damaged by fire or any other cause, or if any other casualty or unforeseen occurrence, including strikes, labor disputes, war, or acts of military authorities, shall render the fulfillment of this Agreement difficult or impossible of performance, this Agreement shall be immediately terminated.

b. PACC shall not in any such case be held liable or responsible to Licensee for any damage caused by termination of this Agreement. PACC shall be relieved from any further liability by reason of this Agreement, and no claims or compensation or damage shall be made against the PACC by Licensee. Any fee for the unused portion of the Agreement shall under such circumstances be refunded to Licensee.

32. Indemnity

a. To the fullest extent permitted by law, Licensee shall (1) immediately defend; (2) indemnify; and (3) hold harmless PACC, the City of Oxnard, its City Council, each member thereof, and its directors, officers, and employees (the "**Indemnified Party**") from and against all liabilities regardless of nature, type, or cause, arising out of or resulting from or in connection with Licensee's performance of this Agreement or Licensee's failure to comply with any of its obligations contained in this Agreement. Liabilities subject to the duties to defend and indemnify include, without limitation, all claims, losses, damages, penalties, fines, and judgments; associated investigation and administrative expenses; defense costs, including but not limited to reasonable attorneys' fees; court costs; and costs of alternative dispute resolution. Licensee's obligation to indemnify applies unless it is adjudicated that any of the liabilities covered by this Section are the result of the sole active negligence or sole willful misconduct of the Indemnified Party. If it is finally adjudicated that liability is caused by the comparative negligence or willful misconduct of the Indemnified Party, Licensee's indemnification obligation shall be reduced in proportion to the established comparative liability of the Indemnified Party.

b. The duty to defend is a separate and distinct obligation from Licensee's duty to indemnify. Licensee shall be obligated to defend, in all legal, equitable, administrative, or special proceedings, with counsel approved by the Indemnified Party immediately upon tender to Licensee of the claim in any form or at any stage of an action or proceeding, whether or not liability is

established. An allegation or determination of negligence or willful misconduct by the Indemnified Party shall not relieve Licensee from its separate and distinct obligation to defend the Indemnified Party. The obligation to defend extends through final judgment, including exhaustion of any appeals. The defense obligation includes the obligation to provide independent defense counsel if Licensee asserts that liability is caused in whole or in part by the negligence or willful misconduct of the Indemnified Party. If it is finally adjudicated that liability was caused by the sole active negligence or sole willful misconduct of the Indemnified Party, Licensee may submit a claim to PACC for reimbursement of reasonable attorneys' fees and defense costs.

c. This Section shall survive completion or termination of this Agreement. The provisions of this Section shall not be restricted by and do not affect the provisions of this Agreement relating to insurance.

33. Insurance

a. Licensee shall obtain and maintain in full force and effect during the use and occupation of Theater under this Agreement the insurance coverage's as specified in Exhibit C, attached hereto and incorporated in full herein by this reference, issued by a company satisfactory to Executive Director, unless Executive Director, waives, in writing, the requirement that Licensee obtain and maintain such insurance coverage's.

b. Licensee shall, prior to the use and occupation of Theater, file with Executive Director evidence of insurance coverage as specified in Exhibit D. Evidence of insurance coverage shall be forwarded to Executive Director, addressed as specified in Exhibit D.

c. Maintenance of proper insurance coverage's by Licensee is a material element of this Agreement. Licensee's failure to maintain or renew insurance coverage's or to provide evidence of renewal may be considered as a material breach of this Agreement.

34. Maintenance and Repair

Licensee agrees to maintain Theater and other portions of the premises of PACC to which Licensee, its employees, agents, licensees or any member of the public has access to by reason of this Agreement in good condition, reasonable wear and tear, damage by the elements, act of God, or casualties beyond the control of Licensee only excepted. Licensee agrees to return Theater in the same condition as before use of the same was permitted, ordinary wear and tear, damage by the elements, acts of God, or casualties beyond the control of Licensee excepted.

35. Default

a. Should Licensee default in the performance of any of the terms and conditions of this Agreement, PACC, at its option, may terminate the Agreement. Licensee shall be liable for the full amount of the fee provided for herein less fees received from others for use of Theater at the time, or times, specified in this Agreement.

b. Any deposit made by Licensee to PACC shall be retained by PACC.

36. Cancellation by PACC

a. In addition to the right to terminate this Agreement upon Licensee's default, PACC shall have the right:

(1) To terminate this Agreement at any time when Theater is required by public necessity or emergency use.

(2) To terminate this Agreement at any time, without liability to PACC, upon ten days written notice when Licensee proposes a special service event for which no fee is to be charged.

(3) To terminate this Agreement at any time without liability to PACC, upon 21 days written notice, in all other instances.

b. Upon termination by PACC, any deposit made by Licensee shall be refunded.

c. Licensee hereby waives any claim Licensee may have against PACC stemming from any cancellation of this Agreement by PACC prior to the date of the event.

37. Cancellation by Licensee

No cancellation by Licensee shall be accepted by Executive Director if less than 21 days prior to the date of the event. Failure to cancel prior to this time will subject Licensee to payment of all fees.

38. Attorneys' Fees

Licensee and PACC agree that the prevailing party's reasonable costs, attorneys' fees and expenses, including investigation fees and expert witness fees, shall be paid by the non-prevailing party in any dispute involving the terms and conditions of this Agreement.

39. Entire Agreement

Licensee and PACC agree that this Agreement constitutes the entire agreement of the parties regarding the subject matter described herein and supersedes all prior communications, agreements, and promises, either oral or written.

Signatures on next page

OXNARD PERFORMING ARTS
CENTER CORPORATION

LICENSEE
OXNARD SCHOOL DISTRICT

Oxnard Performing Arts Center Manager

Lisa A. Franz
Director, Purchasing

NOTE: This License Agreement is a standard agreement previously approved as to form by the City Attorney and the General Counsel.



Addendum to Estimate Sheet

Event: Oxnard School Distric Magic Show

Date: April 11, 2018

Time: 4pm & 7pm

Equipment Rental Fees: \$395.00

Recap of Personnel Fees:

Stage Technicians \$1,417.25

House Manager \$200.00

2 Ushers \$140.00

Box Office Fee N/A

Total Personnel Fees: \$1,757.25

Contract Total Fees:

Rental Fee \$1,150.00

Equipment/ Supplies Fee \$395.00

Personnel Charges \$1,757.25

Insurance own

Ticket Printing N/A

Non-Refundable Processing Fee \$25.00

Security Guards Fee N/A

Total Contract Fees: \$3,327.25

Less Deposit Paid: _____

Total Due to PACC: \$3,327.25

Prepared by: Brad McElmurry/ Technical Requirements/ Phone: (805)385-8162

Prepared by: Jose Becerra/ Rental Information/ Phone: (805)766-8535



ESTIMATE ONLY

Date Proce...	Estimate #
4/11/2018	422

Bill To
Oxnard School District Ginger Shea

Event Name
Garry Carson Magic Show Fund Raiser for O.S.D. 2 Performances

Time Of Event	Date Of Event	Tech Info
4pm & 7pm	4/11/2018	NO

Description	Time	Qty ...	Rate	OT ...	Amount
Stage Lighting			330.00		330.00
House Sound System			0.00		0.00
Lycian #1279 2.5K Followspot		1	65.00		65.00
EQUIPMENT RENTAL SUBTOTAL					395.00
Wed. 4/11/2018 Loadin, Setup, Perf's , Strike					
Stage Technical Director	11a - 9:30p	10	28.00	.5	280.00
Lighting Technician	11a - 9:30p	8	19.00	2.5	152.00
Electrician	11a - 9:30p	8	19.00	2.5	152.00
Stagehand / Spot Op	11a - 9:30p	8	19.00	2.5	152.00
Sound Technician	11a - 9:30p	8	19.00	2.5	152.00
Stage Desk / Curtain Op	11a - 9:30p	8	19.00	2.5	152.00
OT/ Stage 1.5 Rate		12.5	28.50		356.25
OT / Tech Dir		0.5	42.00		21.00
STAGE TECHNICAL LABOR SUBTOTAL					1,417.25

Brad McElmurry Technical Director	PACC Does Not Provide Ladders/ Please Do Not Affix Signs To Painted Surfaces:	Total	\$1,812.25
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OSD BOARD AGENDA ITEM

Name of Contributor: Dr. Jesus Vaca

Date of Meeting: 3/21/18

- | | | | |
|-------|-----------------------|-------|--|
| | Study Session: | _____ | |
| | Closed Session | _____ | |
| A-1. | Preliminary | _____ | |
| A-II. | Reports | _____ | |
| B. | Hearings | _____ | |
| C. | Consent Agenda | _____ | Agreement Category: |
| | | | ___ Academic |
| | | | ___ Enrichment |
| | | | ___ Special Education |
| | | | <u>X</u> Support Services |
| | | | ___ Personnel |
| | | | ___ Legal |
| | | | ___ Facilities |
| D. | Action Items | _____ | |
| F. | Board Policies | _____ | 1st Reading _____ 2nd Reading _____ |

Approval of Agreement #17-282 – Terra Firma Enterprises (Vaca/Magana)

Terra Firma Enterprises will evaluate and assess the District Office and school sites coordination and communication capabilities during an Emergency Operations Center activation. The functional exercise will incorporate activities from selected school sites, the City of Oxnard, and essential stakeholders.

FISCAL IMPACT:

Not to exceed \$21,060.00 – General Fund

RECOMMENDATION:

It is the recommendation of the Assistant Superintendent, Human Resources & Support Services, and the Risk Manager, that the Board of Trustees approve Agreement #17-282 with Terra Firma Enterprises, in the amount not to exceed \$21,060.00.

ADDITIONAL MATERIALS:

Attached: Agreement #17-282, Terra Firma Enterprises (13 Pages)
Scope of Work (4 Pages)

OXNARD SCHOOL DISTRICT

Agreement #17-282

AGREEMENT FOR CONSULTANT SERVICES

This Agreement for Consultant Services (“Agreement”) is entered into as of this 21st day of March, 2018 by and between the Oxnard School District (“District”) and Terra Firma Enterprises (“Consultant”). District and Consultant are sometimes hereinafter individually referred to as “Party” and hereinafter collectively referred to as the “Parties.”

RECITALS

- A. District is authorized by *California Government Code* Section 53060, and Board Policy 4368, to contract with independent contractors for the furnishing of services concerning financial, economic, accounting, engineering, legal, administrative and other matters. District has sought, by issuance of a Request for Proposals or Invitation for Bids, the performance of the Services, as defined and described particularly on **Exhibit A**, attached to this Agreement.
- B. Following submission of a proposal or bid for the performance of the Services, Consultant was selected by the District to perform the Services.
- C. The Parties desire to formalize the selection of Consultant for performance of the Services and desire that the terms of that performance be as particularly defined and described herein.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the mutual promises and covenants made by the Parties and contained here and other consideration, the value and adequacy of which are hereby acknowledged, the parties agree as follows:

- Incorporation of Recitals and Exhibits.** The Recitals set forth above and all exhibits attached to this Agreement, as hereafter amended, are incorporated by this reference as if fully set forth herein.
- Term of Agreement.** Subject to earlier termination as provided below, this Agreement shall remain in effect from **April 1, 2018** through **June 30, 2019** (the “Term”). This Agreement may be extended only by amendment, signed by the Parties, prior to the expiration of the Term.
- Time for Performance.** The scope of services set forth in **Exhibit A** shall be completed during the Term pursuant to the schedule specified **Exhibit A**. Should the scope of services not be completed pursuant to that schedule, the Consultant shall be deemed to be in Default as provided below. The District, in its sole discretion, may choose not to enforce the Default provisions of this Agreement and may instead allow Consultant to continue performing the Services.
- Compensation and Method of Payment.** Subject to any limitations set forth below or elsewhere in this Agreement, District agrees to pay Consultant the amounts specified in **Exhibit B** “Compensation”. The total compensation, including reimbursement for actual expenses, shall not exceed Twenty-One Thousand Sixty Dollars (\$21,060.00), unless additional compensation is approved in writing by the District.

- a. Each month Consultant shall furnish to District an original invoice for all work performed and expenses incurred during the preceding month. The invoice shall detail charges by the following categories: labor (by sub-category), travel, materials, equipment, supplies, and sub-consultant contracts. Sub-consultant charges, if any, shall be detailed by the following categories: labor, travel, materials, equipment and supplies. District shall independently review each invoice submitted by the Consultant to determine whether the work performed and expenses incurred are in compliance with the provisions of this Agreement. In the event that no charges or expenses are disputed, the invoice shall be approved and paid according to the terms set forth in subsection b. In the event any charges or expenses are disputed by District, the original invoice shall be returned by District to Consultant for correction and resubmission.
- b. Except as to any charges for work performed or expenses incurred by Consultant which are disputed by District, District will use its best efforts to cause Consultant to be paid within forty-five (45) days of receipt of Consultant's correct and undisputed invoice.
- c. Payment to Consultant for work performed pursuant to this Agreement shall not be deemed to waive any defects in work performed by Consultant.

5. **Termination.** This Agreement may be terminated at any time by mutual agreement of the Parties or by either Party as follows:

- a. District may terminate this Agreement, with or without cause, at any time by giving thirty (30) days written notice of termination to Consultant. In the event such notice is given, Consultant shall cease immediately all work in progress; or
- b. Consultant may terminate this Agreement for cause at any time upon thirty (30) days written notice of termination to District.

6. **Inspection and Final Acceptance.** District may, at its discretion, inspect and accept or reject any of Consultant's work under this Agreement, either during performance or when within sixty (60) days after submitted to District. If District does not reject work by a timely written explanation, Consultant's work shall be deemed to have been accepted. District's acceptance shall be conclusive as to such work except with respect to latent defects, fraud and such gross mistakes as amount to fraud. Acceptance of any of Consultant's work by District shall not constitute a waiver of any of the provisions of this Agreement including, but not limited to indemnification and insurance provisions.

7. **Default.** Failure of Consultant to perform any Services or comply with any provisions of this Agreement may constitute a default. The District may give notice to Consultant of the default and the reasons for the default. District shall not have any obligation or duty to continue compensating Consultant for any work performed after the date of the notice until the default is cured. The notice shall include the timeframe in which Consultant may cure the default. This timeframe is presumptively thirty (30) days, but may be extended, though not reduced, at the discretion of the District. During the period of time that Consultant is in default, the District shall hold all invoices and shall, when the default is cured, proceed with payment on the invoices. In the alternative, the District may, in its sole discretion, elect to pay some or all of the outstanding invoices during the period of default. If Consultant does not cure the default, the District may terminate this Agreement as provided above. Any failure on the part of the District to give notice of the Consultant's default shall not be deemed to result in a waiver of the District's legal rights or any rights arising out of any provision of this Agreement.

8. **Ownership of Documents.** All maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files and other documents prepared, developed or discovered by Consultant in the course of providing any services pursuant to this Agreement (collectively and individually, the "Documents") shall

become the sole property of District and may be used, reused or otherwise disposed of by District without the permission of the Consultant. Upon completion, expiration or termination of this Agreement, Consultant shall turn over to District all such Documents.

9. **Use of Documents by District.** If and to the extent that District utilizes for any purpose not related to this Agreement any Documents, Consultant's guarantees and warrants related to Standard of Performance under this Agreement shall not extend to such use of the Documents.

10. **Consultant's Books and Records.** Consultant shall maintain any and all documents and records demonstrating or relating to Consultant's performance of services pursuant to this Agreement for a minimum of three years after termination or expiration of this Agreement, or longer if required by law.

- a. Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, or other documents or records evidencing or relating to work, services, expenditures and disbursements charged to District pursuant to this Agreement for a minimum of three years, or longer if required by law, all in accordance with generally accepted accounting principles and with sufficient detail so as to permit an accurate evaluation of the services provided by Consultant pursuant to this Agreement.
- b. Any and all such records or documents shall be made available for inspection, audit and copying, at any time during regular business hours, upon request by District or its designated representative. Copies of such documents or records shall be provided directly to the District for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed upon, such documents and records shall be made available at Consultant's address indicated for receipt of notices in this Agreement.
- c. District has the right to acquire custody of such records by written request if Consultant decides to dissolve or terminate its business. Consultant shall deliver or cause to be delivered all such records and documents to District within sixty (60) days of receipt of the request.

11. **Independent Contractor.** Consultant is and shall at all times remain a wholly independent contractor and not an officer, employee or agent of District.

- a. The personnel performing the services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant, its agents or employees shall not at any time or in any manner represent that Consultant or any of Consultant's officers, employees, or agents are in any manner officials, officers, employees or agents of District. Neither Consultant, nor any of Consultant's officers, employees or agents, shall, by virtue of services rendered under this Agreement, obtain any rights to retirement, health care or any other benefits which may otherwise accrue to District's employees. Consultant will be responsible for payment of all Consultant's employees' wages, payroll taxes, employee benefits and any amounts due for federal and state income taxes and Social Security taxes since these taxes will not be withheld from payment under this agreement.
- b. Consultant shall have no authority to bind District in any manner, or to incur any obligation, debt or liability of any kind on behalf of or against District, whether by contract or otherwise, unless such authority is expressly conferred in writing by District, or under this Agreement.

12. **Standard of Performance.** Consultant represents and warrants that it has the qualifications, experience and facilities necessary to properly perform the services required under this Agreement in a thorough, competent and professional manner. Consultant shall at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described herein. In meeting its obligations under this Agreement,

Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement.

13. **Confidential Information.** All information gained during performance of the Services and all Documents or other work product produced by Consultant in performance of this Agreement shall be considered confidential. Consultant shall not release or disclose any such information, Documents or work product to persons or entities other than District without prior written authorization from the Superintendent of the District, except as may be required by law.

- a. Consultant shall promptly notify District if it is served with any summons, complaint, subpoena or other discovery request, court order or other request from any party regarding this Agreement or the work performed hereunder.
- b. District retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with District and to provide District with the opportunity to review any response to discovery requests provided by Consultant; provided that this does not imply or mean the right by District to control, direct, or rewrite said response.

14. **Conflict of Interest; Disclosure of Interest.** Consultant covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, which would conflict in any manner with the interests of District or which would in any way hinder Consultant’s performance of services under this Agreement. Consultant further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor without the express written consent of the District.

- a. Consultant agrees to at all times avoid conflicts of interest or the appearance of any conflicts of interest with the interests of District in the performance of this Agreement.
- b. Bylaws of the Board 9270 BB and 9270(BB) E, as hereinafter amended or renumbered, require that a Consultant that qualifies as a “designated employee” must disclose certain financial interests by filing financial interest disclosures. By its initials below, Consultant represents that it has received and reviewed a copy of the Bylaws of the Board 9270 BB and 9270(BB) E and that it [] does [X] does not qualify as a “designated employee”.

_____ (Initials)

- c. Consultant agrees to notify the Superintendent, in writing, if Consultant believes that it is a “designate employee” and should be filing financial interest disclosures, but has not been required to do so by the District.

_____ (Initials)

15. **Compliance with Applicable Laws.** In connection with the Services and its operations, Consultant shall keep itself informed of and comply with all applicable federal, state and local laws, statutes, codes, ordinances, regulations and rules including, but not limited to, minimum wages and/or prohibitions against discrimination, in effect during the Term. Consultant shall obtain any and all licenses, permits and authorizations necessary to perform the Services. Neither District, nor any elected or appointed boards, officers, officials, employees or agents of District shall be liable, at law or in equity, as a result of any failure of Consultant to comply with this section.

- a. ~~Without limiting the generality of the foregoing, Consultant shall comply with any applicable fingerprinting requirements as set forth in the Education Code of the State of California.~~

_____ (Initials)

16. **Unauthorized Aliens.** Consultant hereby promises and agrees to comply with all of the provisions of the Federal Immigration and Nationality Act, 8 U.S.C.A. §§ 1101, et seq., as amended, and in connection therewith, shall not employ “unauthorized aliens” as that term is defined in 8 U.S.C.A. §1324a(h)(3). Should Consultant so employ such individuals for the performance of work and/or services covered by this Agreement, and should any liability or sanctions be imposed against District for such employment, Consultant hereby agrees to and shall reimburse District for the cost of all such liabilities or sanctions imposed, together with any and all costs, including attorneys' fees, incurred by District.

17. **Non-Discrimination.** Consultant shall abide by the applicable provisions of the United States Civil Rights Act of 1964 and other provisions of law prohibiting discrimination and shall not discriminate, in any way, against any person on the basis of race, color, religious creed, national origin, ancestry, sex, age, physical handicap, medical condition or marital status in connection with or related to the performance of this Agreement.

18. **Assignment.** The expertise and experience of Consultant are material considerations for this Agreement. District has an interest in the qualifications of and capability of the persons and entities that will fulfill the duties and obligations imposed upon Consultant under this Agreement. In recognition of that interest, Consultant shall not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Consultant’s duties or obligations under this Agreement without the prior written consent of the Board of Directors of the District. Any attempted assignment shall be ineffective, null and void, and shall constitute a material breach of this Agreement entitling District to any and all remedies at law or in equity, including summary termination of this Agreement.

19. **Subcontracting.** Notwithstanding the above, Consultant may utilize subcontractors in the performance of its duties pursuant to this Agreement, but only with the prior written consent of the District. The Consultant shall be as fully responsible to the District for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by him/her, as if the acts and omissions were performed by him/her directly.

20. **Continuity of Personnel.** Consultant shall make every reasonable effort to maintain the stability and continuity of Consultant’s staff and subcontractors, if any, assigned to perform the services required under this Agreement.

- a. Consultant shall insure that District has a current list of all personnel and sub-contractors providing services under this Agreement.
- b. Consultant shall notify District of any changes in Consultant’s staff and subcontractors, if any, assigned to perform the services required under this Agreement, prior to and during any such performance. The list notice shall include the following information: (1) all full or part-time staff positions by title, including volunteer positions whose direct services are required to provide the services described herein; (2) a brief description of the functions of each such position and the hours each position works each week or, for part-time positions, each day or month, as appropriate; (3) the professional degree, if applicable, and experience required for each position; and (4) the name of the person responsible for fulfilling the terms of this Agreement.

21. **Indemnification.**

- a. Consultant agrees to defend, indemnify, and hold harmless District, its officers, agents, employees, and/or volunteers from any and all claims, demands, losses, damages and expenses, including legal fees and costs, or other obligations or claims arising out of any liability or damage to property, or any other loss, sustained or claimed to have been sustained arising out of activities of the Consultant or those of any of Consultant’s officers, agents, employees, or subcontractors, whether such act or omission is authorized by this Agreement or not. Consultant shall also pay for any and all damage to the Property of the District, or loss or theft of such Property, done or caused by such persons. District

assumes no responsibility whatsoever for any property placed on district premises. Consultant further agrees to waive all rights of subrogation against the District. The provisions of this Agreement do not apply to any damage or losses caused solely by the negligence of the District or any of its officers, agents, employees, and/or volunteers.

_____ (Initials)

- b. The provisions of this section do not apply to claims occurring as a result of District's sole negligence or willful acts or omissions.

22. **Insurance.** Consultant agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance policies set forth in **Exhibit C** "Insurance" and made a part of this Agreement. All insurance policies shall be subject to approval by District as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the District Superintendent. Consultant agrees to provide District with copies of required policies upon request.

23. **Notices.** All notices required or permitted to be given under this Agreement shall be in writing and shall be personally delivered, or sent by telecopier or certified mail, postage prepaid and return receipt requested, addressed as follows:

To District: Oxnard School District
1051 South A Street
Oxnard, California, 93030
Attention: Norma Magana
Phone: 805.385.1501 x2443
Fax: 805.240.5963

To Consultant: Terra Firma Enterprises
181 Westminster Avenue
Ventura, CA 93003
Attention: Wendy H. Milligan
Phone: 805.642.5232
Fax: 805.642.2883

Notice shall be deemed effective on the date personally delivered or transmitted by facsimile (provided confirmation of successful facsimile transmission shall be retained) or, if mailed, three (3) days after deposit of the same in the custody of the United States Postal Service.

24. **Excusable Delays.** Consultant shall not be liable for damages, including liquidated damages, if any, caused by delay in performance or failure to perform due to causes beyond the control of Consultant. Such causes include, but are not limited to, acts of God, acts of the public enemy, acts of federal, state or local governments, acts of District, court orders, fires, floods, epidemics, strikes, embargoes, and unusually severe weather. The term and price of this Agreement shall be equitably adjusted for any delays due to such causes.

25. **Authority to Execute.** The person or persons executing this Agreement on behalf of Consultant represents and warrants that he/she/they has/have the authority to so execute this Agreement and to bind Consultant to the performance of its obligations hereunder.

26. **Administration.** **NORMA MAGANA** shall be in charge of administering this Agreement on behalf of the District. The Director of Purchasing has completed **Exhibit D** "Conflict of Interest Check" attached hereto.

27. **Binding Effect.** This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties.
28. **Entire Agreement.** This Agreement and the exhibits and documents incorporated herein constitute the entire agreement and understanding between the parties in connection with the matters covered herein.
29. **Amendment.** No amendment to or modification of this Agreement shall be valid or binding unless made in writing by the Consultant and by the District. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver shall be void.
30. **Waiver.** Waiver by any party to this Agreement of any term, condition, or covenant of this Agreement shall not constitute a waiver of any other term, condition, or covenant. Waiver by any party of any breach of the provisions of this Agreement shall not constitute a waiver of any other provision or a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by District of any work or services by Consultant shall not constitute a waiver of any of the provisions of this Agreement.
31. **Governing Law.** This Agreement shall be interpreted, construed and governed according to the laws of the State of California. In the event of litigation between the parties, venue in state trial courts shall lie exclusively in the County of Ventura, California.
32. **Arbitration.** Any dispute arising out of the performance of this Agreement shall be resolved by binding arbitration in accordance with rules and procedures of the American Arbitration Association.
33. **Severability.** If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall not be affected thereby and the Agreement shall be read and construed without the invalid, void or unenforceable provision(s).

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the District and Consultant have executed and delivered this agreement for consultant services as of the date first written above.

OXNARD SCHOOL DISTRICT:

TERRA FIRMA ENTERPRISES:

Signature

Signature

Lisa A. Franz, Director, Purchasing

Typed Name/Title

Typed Name/Title

Date

Date

Tax Identification Number: 95-6002318

Tax Identification Number: _____

- Not Project Related
- Project #17-282

EXHIBIT A
TO AGREEMENT FOR CONSULTANT SERVICES #17-282

SERVICES

I. Consultant will perform the following Services under the Captioned Agreement:

***SEE ATTACHED SCOPE OF WORK**

II. As part of the Services, Consultant will prepare and deliver the following tangible work products to the District:

***SEE ATTACHED SCOPE OF WORK**

III. During performance of the Services, Consultant will keep the District appraised of the status of performance by delivering the following status reports under the indicated schedule:

STATUS REPORT FOR ACTIVITY:	DUE DATE
A. N/A	
B. N/A	
C. N/A	
D. N/A	

V. Consultant will utilize the following personnel to accomplish the Services:

- None.
- See attached list.

VI. Consultant will utilize the following subcontractors to accomplish the Services (check one):

- None.
- See attached list.

VII. AMENDMENT

The Scope of Services, including services, work product, and personnel, are subject to change by mutual Agreement. In the absence of mutual Agreement regarding the need to change any aspects of performance, Consultant shall comply with the Scope of Services as indicated above

- Not Project Related
 Project #17-282

EXHIBIT B
TO AGREEMENT FOR CONSULTANT SERVICES #17-282

COMPENSATION

I. Consultant shall use the following rates of pay in the performance of the Services:

***SEE ATTACHED SCOPE OF WORK**

II. Consultant may utilize subcontractors as indicated in this Agreement. The hourly rate for any subcontractor is not to exceed \$0.00 per hour without written authorization from the District Superintendent or his designee.

III. The District will compensate Consultant for the Services performed upon submission of a valid invoice. Each invoice is to include:

- A. Line items for all personnel describing the work performed, the number of hours worked, and the Hourly or flat rate.
- B. Line items for all supplies properly charged to the Services.
- C. Line items for all travel properly charged to the Services.
- D. Line items for all equipment properly charged to the Services.
- E. Line items for all materials properly charged to the Services.
- F. Line items for all subcontractor labor, supplies, equipment, materials, and travel properly charged to the Services.

IV. The total compensation for the Services shall not exceed \$21,060.00, as provided in Section 4 of this Agreement.

EXHIBIT C
TO AGREEMENT FOR CONSULTANT SERVICES #17-282

INSURANCE

I. Insurance Requirements. Consultant shall provide and maintain insurance, acceptable to the District Superintendent or District Counsel, in full force and effect throughout the term of this Agreement, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by Consultant, its agents, representatives or employees. Insurance is to be placed with insurers authorized to conduct business in the State of California and with a current A.M. Best's rating of no less than A, as rated by the Current edition of Best's Key Rating Guide, published by A.M. Best Company, Oldwick, New Jersey 08858. Consultant shall provide the following scope and limits of insurance:

A. Minimum Scope of Insurance. Coverage shall be at least as broad as:

(1) Commercial General Liability coverage of not less than two million dollars (\$2,000,000) Aggregate and one million dollars (\$1,000,000) per occurrence.

(2) Auto liability insurance with limits of not less than ~~one million dollars (\$1,000,000)~~ one hundred thousand (\$100,000)/three hundred thousand dollars (\$300,000).

(3) Insurance coverage should include:

1. owned, non-owned and hired vehicles;
2. blanket contractual;
3. broad form property damage;
4. products/completed operations; and
5. personal injury.

(4) Workers' Compensation insurance as required by the laws of the State of California.

~~(5) Abuse and Molestation coverage of not less than two million dollars (\$2,000,000) per occurrence and five million dollars (\$5,000,000) Aggregate.~~

(6) Professional liability (Errors and Omissions) insurance, including contractual liability, as appropriate to the Consultant's profession, in an amount of not less than the following:

Accountants, Attorneys, Education Consultants, Nurses, Therapists	\$1,000,000
Architects	\$1,000,000 or \$2,000,000
Physicians and Medical Corporations	\$5,000,000

Failure to maintain professional liability insurance is a material breach of this Agreement and grounds for immediate termination

II. Other Provisions. Insurance policies required by this Agreement shall contain the following provisions:

Not Project Related

Project #17-282

A. All Policies. Each insurance policy required by this Agreement shall be endorsed and state the coverage shall not be suspended, voided, cancelled by the insurer or either party to this Agreement, reduced in coverage or in limits except after 30 days' prior written notice by Certified mail, return receipt requested, has been given to District

B. General Liability, Automobile Liability, and Abuse/Molestation Coverages.

(1) District, and its respective elected and appointed officers, officials, employees and volunteers are to be covered as additional insureds (collectively, "additional insureds") as respects the following: liability arising out of activities Consultant performs; products and completed operations of Consultant; premises owned, occupied or used by Consultant ; automobiles owned, leased, hired or borrowed by Consultant, ~~and Abuse/Molestation~~. The coverage shall contain no special limitations on the scope of protection afforded to additional insureds.

(2) Each policy shall state that the coverage provided is primary and any insurance carried by any additional insured is in excess to and non-contributory with Consultant's insurance.

(3) Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

(4) Any failure to comply with the reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to any additional insured.

III. Other Requirements. Consultant agrees to deposit with District, at or before the effective date of this contract, certificates of insurance necessary to satisfy District that the insurance provisions of this contract have been complied with. The District may require that Consultant furnish District with copies of original endorsements effecting coverage required by this Section. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. District reserves the right to inspect complete, certified copies of all required insurance policies, at any time.

A. If any Services are performed by subcontractor, Consultant shall furnish certificates and endorsements from each subcontractor identical to those Consultant provides.

B. Any deductibles or self-insured retentions must be declared to and approved by District. At the option of District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects District or its respective elected or appointed officers, officials, employees and volunteers or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration, defense expenses and claims.

C. The procuring of any required policy or policies of insurance shall not be construed to limit Consultant's liability hereunder nor to fulfill the indemnification provisions and requirements of this Agreement.

Not Project Related

Project #17-282

EXHIBIT D
TO AGREEMENT FOR CONSULTANT SERVICES #17-282

CONFLICT OF INTEREST CHECK

Bylaws of the Board 9270(BB)E requires that the Superintendent or a designee make a determination, on a case by case basis, concerning whether disclosure will be required from a consultant to comply with the District's Conflict of Interest Code (commencing with Bylaws of the Board 9270 BB).

Consultant's are required to file disclosures when, pursuant to a contract with the District, the Consultant will make certain specified government decisions or will perform the same or substantially the same duties for the District as a staff person would.

The services to be performed by Consultant under the Agreement to which this Exhibit D is attached constitute do not constitute governmental decisions or staff services within the meaning of the Conflict of Interest Code. Therefore, the Consultant, **TERRA FIRMA ENTERPRISES**, who will provide Services under the Agreement, is is not subject to disclosure obligations.

Date: _____

By: _____

Lisa A. Franz
Director, Purchasing



SCOPE OF WORK

- **FUNCTIONAL EXERCISE** - Terra Firma Enterprises (TFE) will provide technical assistance to the Oxnard School District (OSD) to design, develop and implement a functional exercise for the District. The functional exercise will incorporate activities from selected school sites, the City of Oxnard and essential stakeholders.

The exercise will be designed as a 3-4 hour functional exercise to evaluate and assess the District Office and school site's coordination and communication capabilities during an EOC activation. OSD staff will be notified of an emergency and will be asked to respond to the EOC, staff will need to activate/set up their EOC and respond to simulated messages coming into the EOC from the City and school sites, staff at the District Office will be asked to participate by performing Search and Rescue and Disaster Medical activities. EOC staff will use the tools available in the EOC to gather information about the disaster and damages to school sites, make decisions based on the information and support school sites and District staff with their response efforts.

The exercise will comply with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

- **SCHOOL EMERGENCY RESPONSE TEAM TRAINING** - TFE will provide a streamlined version (12 hours) of the Community Emergency Response Team (CERT) training. Typically, the Federal Emergency Management Agency's (FEMA) CERT training taught to communities and cities is 20 hours in length. TFE will provide 10 hours of training that focuses on the needs of school sites and 2 hours of training just for district staff to focus on their particular needs at the District Office. Training certificates will be provided to those participants completing the entire series. This School Emergency Response Team (SERT) training will consist of the following modules:

1. **Incident Command** – Organizing your team (School site)
2. **Pre-EOC Activation Procedures** - Accountability and reporting information (District staff only)
3. **Disaster Psychology** – Understanding post-disaster emotional environment (School site and District staff)
4. **Disaster Medical** – Head-to-toe assessments, basic first aid, treating airway obstruction, bleeding and shock (School site and District staff)
5. **Search and Rescue** (Search and Sweep) – Size-up, search techniques, rescue techniques and rescue safety (School site and District staff)
6. **Student Reunification Procedures** – Student Reunification procedures and techniques (School site)

Each module will be 2 hours in length and will include practical exercises to practice the techniques covered during the module. Each module will be facilitated by two instructors.

PARTICIPATION OF OXNARD SCHOOL DISTRICT (OSD)

The OSD will provide a Project Manager to act as a principle point of contact for information and product reviews.

PROJECT DETAILS

FUNCTIONAL EXERCISE	
Planning Meetings – TFE will participate in various planning meetings to work with the Project Manager and other key individuals as appropriate to assist with developing all exercise materials.	8
Research, Data Collection and Scenario Development – Gather and analyze specific scenario information to develop vital exercise information to make the exercise realistic and applicable to the District and the participating school sites.	12
Exercise Design, Development and Support - TFE will develop all exercise documentation which will include: Exercise Plan (Ex Plan), Master Scenario Events List (MSEL) and a Controller/Evaluator Handbook. The Ex Plan contains: Information and Instruction Sheet, Agenda and Ground Rules, Exercise Organization Chart, Scenario, Exercise Critique Sheet and reference material appropriate for the scenario. The MSEL will summarize the messages or injects that will be delivered into the District’s EOC via various employees in the field. TFE will also develop the material needed for District staff to practice Search and Rescue and Disaster Medical procedures during the exercise.	50
Functional Exercise - TFE will direct and coordinate staff through the Functional Exercise and after exercise critique. Includes set-up and breakdown time. (Includes two facilitators to properly monitor the exercise).	12
Written Report - TFE will provide the District with an After Action Report/ Corrective Action Report incorporating critique and comments from participants along with recommendations for improving the District’s emergency management program and to enhance the District’s coordination and communication capabilities with its school sites and the City of Oxnard.	8
TOTAL HOURS FOR FUNCTIONAL EXERCISE	90
TOTAL COST FOR FUNCTIONAL EXERCISE (90 x \$130)	\$11,700.
SERT TRAINING	
Instruction Time – TFE will provide SERT instruction for 12 hours – Two instructors will deliver the class materials and facilitate practical exercises for no more than 40 people .	24
Materials development and Instructor preparation – TFE will compile all course materials and will forward all instructional material to the District to make the appropriate number of copies. TFE will provide the other class materials needed for the activities, i.e. cribbing material, disaster medical supplies, etc. (Time includes instructor prep time of 1 hr/module).	12

*TOTAL HOURS FOR MATERIALS DEVELOPMENT AND INSTRUCTION OF SERT TRAINING	36
*TOTAL COST FOR SERT TRAINING (36 x \$130)	\$4,680.
* If the District chooses to offer this series multiple times, Each offering of the entire series will be \$4,680 or \$780 for individual extra modules.	

SUMMARY OF COSTS – Any additional costs outside the scope of work need to be approved and requested by the District Project Manager. All approved additional work will be billed at the standard rate of \$130/hour.

Functional Exercise – District Staff and selected school sites (90 hours x \$130/hr)	\$11,700.
SERT Training (For each offering of the 6 module series)	\$4,680.
TOTAL COSTS FOR ALL PROJECTS (Not to exceed amount) This cost includes only 1 offering of the 6 module series.	\$16,380.

TIMELINE

TFE and the District’s Project Manager will establish the schedule of performance to meet the District’s goals and objectives for the school year.

The general schedule will need to be flexible to meet the District’s scheduling parameters. Any schedule changes will need to be approved by the District Project Manager.

PAYMENT SCHEDULE

TFE will invoice the District at the beginning of each month for any hours that were worked in the previous month.

GENERAL STATEMENT OF FINANCIAL CONDITION

TFE stands on a solid financial foundation. It has no liens, or judgments pending, nor has any outstanding liabilities. TFE has sufficient resources to perform tasks as outlined.

Although TFE stands by the quality of its products, the OSD must understand that disaster preparedness is not an exact science, and the products TFE offers do not guarantee the safety of any individual, structure, or organization in a disaster. TFE assumes no liability for deaths, injuries, or property damage resulting from a disaster.

TFE holds Commercial General Liability (\$2,000,000) and Errors and Omission (\$1,000,000.) insurance policies with Lloyd’s of London Insurance Company.

CONSULTANT QUALIFICATIONS

Wendy Haddock Milligan of TFE brings with her over 30 years of experience in the field of emergency management. Eight of those years she spent with the Ventura County Sheriff's Department Office of Emergency Services (OES). As the Assistant Director of Ventura County Sheriff's OES, she acquired an extensive base of knowledge about the County, the cities in the County and the numerous special districts. She has met federal and state requirements with all county response plans, created a nationally recognized community disaster training program, designed and implemented numerous training exercises for private and public sectors, coordinated the response to six presidential disasters, and has recovered millions of dollars for the County in the Federal and State reimbursement process.

Not only does Wendy Haddock Milligan have years of experience in the field of emergency management, she also holds a Master's Degree in Public Administration, a certification from the International Association of Emergency Management as a Certified Emergency Manager, a Master Exercise Practitioner certification from the Federal Emergency Management Agency and a certificate as a Hazardous Materials Emergency Manager from the University of California at Davis.

Wendy has written over 60 comprehensive Emergency Operations Plan ranging from small jurisdictions to large counties and has designed and implemented over 60 exercises varying from specific drills to full-scale weapons of mass destruction exercises and has trained thousands of professionals learning more about emergency management, SEMS and NIMS.

For a complete listing of plans, trainings and exercises, refer to TFE website: www.TerraFirmaEnterprises.com.

***This quote is valid for 90-days from the date of this proposal.**

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. Preliminary** _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:**
____ Academic
X **Enrichment**
____ **Special Education**
____ **Support Services**
____ **Personnel**
____ **Legal**
____ **Facilities**
- D. Action Items** _____
F. Board Policies **1st Reading** _____ **2nd Reading** _____

Ratification of Amendment #1 to Agreement/MOU #17-232 – Buck Institute for Education (Freeman/West)

At the Board meeting of December 6, 2017, the Board of Trustees approved Agreement #17-232 with the Buck Institute for Education to provide a total of four days of professional development services for teachers in the Oxnard School District during the 2017-18 school year in the amount of \$14,500.00. Due to the Ventura County fires and resulting low teacher participant numbers, one of the four days requires rescheduling. The original contract with the Buck Institute for Education provides for additional travel fees associated with this change.

Amendment #1 in the amount of \$2,750.00 is required to cover the travel fees associated with the rescheduled date, bringing the total contract amount to \$17,250.00.

FISCAL IMPACT:

Not to exceed \$2,750.00 – MSAP

RECOMMENDATION:

It is recommended by the Director, MSAP, and the Assistant Superintendent, Educational Services, that the Board of Trustees ratify Amendment #1 to Agreement/MOU #17-232 with the Buck Institute for Education.

ADDITIONAL MATERIAL(S):

Attached: Amendment #1 (1 Page)
 Agreement/MOU #17-232, Buck Institute for Education (5 Pages)

AMENDMENT #1 TO AGREEMENT #17-232
Buck Institute for Education

At the Board meeting of December 6, 2017, the Board of Trustees approved Agreement #17-232 with the Buck Institute for Education to provide a total of 4 days of professional development services for teachers in the Oxnard School District during the 2017-18 school year in the amount of \$14,500.00. Due to the Ventura County fires and resulting low teacher participant numbers, one of the 4 days requires rescheduling. There are additional travel fees associated with this change in the original contract with the Buck Institute for Education.

Amendment #1 in the amount of \$2,750.00 is required to cover the travel fees associated with the rescheduled date, bringing the total contract amount to \$17,250.00.

BUCK INSTITUTE FOR EDUCATION:

OXNARD SCHOOL DISTRICT:

Signature

Signature

Deborah Hunter
Chief Strategy and Operation Officer
Typed Name/Title

Robin Freeman
Asst. Supt., Educational Services
Typed Name/Title

Date

Date

AGREEMENT #17-232 BETWEEN
BUCK INSTITUTE FOR EDUCATION AND OXNARD SCHOOL DISTRICT
FOR PROFESSIONAL DEVELOPMENT TRAININGS AND FOLLOW-UP
IN MSAP OBJECTIVES PROJECT BASED LEARNING

The scope of this document is to define the roles and responsibilities of the Buck Institute for Education (BIE) and the Oxnard School District (OSD). The purpose of this agreement is to provide MSAP Academy educators with training and support regarding the implementation of project based learning with the focus on the STEAM Academy programs.

This serves as a Memorandum of Understanding and Responsibility Agreement that the Oxnard School District and the Buck Institute for Education will work together toward training Oxnard STEAM Academy educators in project-based learning. Both the agency and consultant, according to its defined role, agrees to participate in coordinating, providing and financing the following services for the purpose of this agreement.

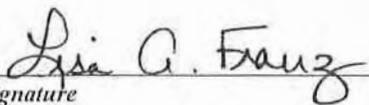
1. **Buck Institute for Education agrees to:**
 - a. Provide three (e) follow-up training days and sustainability planning for 35 Oxnard School District educators from the 3 middle schools as part of the Buck Institute's Project Based Learning 101 Workshop.
 - b. One (1) Sustained Support Visit
 - c. Provide Oxnard School District with Certificate of Insurance naming the Oxnard School District as "additional insured".
 - d. Total program costs not to exceed \$14,500.00 for professional development, consultant travel and accommodations, and instructional materials.
 - e. BIE and Client agree that BIE will assign an appropriately trained and experienced primary presenter, a "National Faculty" designee, for the training program described in this Contract. BIE will be solely responsible for payment of his/her compensation. National Faculty members are not BIE employees. When assigned to a particular project, a National Faculty member serves in the capacity of an independent contractor to BIE. The person(s) assigned by BIE to act as presenter of BIE materials under this Contract is not an agent of BIE and has no authority to modify the terms and provisions of this Contract on behalf of BIE, or to bind BIE to provide any additional materials or services related to this Contract which are not specified in this Contract. The assigned presenter is solely responsible for his/her conduct, manner and actions in presentation of BIE materials under this Contract.

2. **Oxnard School District, on behalf of the 3 MSAP funded STEAM academies, agrees to:**
 - a. Provide payment in the amount not-to-exceed \$14,500.00.
 - b. Provide the training site at an OSD facility and arrange for LCD monitor and audio set up for said training.
 - c. If the District cancels the workshop, the District will be responsible for non-refundable expenses (minimum \$250 per workshop) already incurred. If the District postpones the workshop, District will be responsible for any additional costs associated with rescheduling.

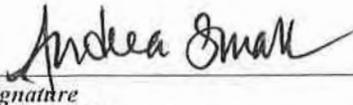
Oxnard School District will monitor this agreement to oversee implementation of PBL 101 Workshop follow up training. This Memorandum of Understanding and Responsibility Agreement shall be effective upon signature and implemented on December 7, 2017.

OXNARD SCHOOL DISTRICT:

BUCK INSTITUTE FOR EDUCATION:



Signature



Signature

Lisa A. Franz, Director, Purchasing

Typed Name/Title

ANDREA SMALL
SR. DIRECTOR OF FINANCE & ADMINISTRATION

Typed Name/Title

12-11-17

Date

11/29/17

Date



SERVICES PROPOSAL

Prepared For Oxnard School District

Debby West

Proposal Number: P-6211

Proposal Date: September 14, 2017

Services

Service	Service Price (USD)	Quantity	Total Service Price (USD)
PBL 101 Workshop	\$11,750.00	1	\$11,750.00
Sustained Support Visit (Add on Pricing)	\$2,750.00	1	\$2,750.00

Total: USD \$14,500.00

These prices are valid for scheduled services in the continental United States within the date ranges listed above. Prices are inclusive of facilitator fees, travel, accommodations, and administrative and other costs.

This is a non-binding quote for service offerings requested of the Buck Institute for Education (BIE). Service scheduling is not confirmed until a signed Services Agreement has been received by BIE. Peak demand for service delivery is June-August. Clients are advised to confirm services 60+ days in advance of the desired service delivery date.

This offer is valid for 60 days following the proposal date.

Appendix

Service	Start Date	End Date
PBL 101 Workshop	1/3/2018	1/5/2018
Sustained Support Visit (Add on Pricing)	1/6/2018	1/6/2018

BIE Service Descriptions

Core & Systemic Service Offerings	
Service	Service Description
PBL 101 Workshops	<p>PBL 101 is BIE’s foundational three-day (consecutive, 7.0 hours per day) onsite workshop. Based on BIE's model of Gold Standard PBL, the workshop provides participants with the skills and knowledge needed to design, assess and manage a rigorous, relevant, and standards-based project. The workshop models the project process. Facilitated by one of BIE's expert National Faculty, the workshop is a balanced blend of direct instruction, video analysis, hands-on work, resource sharing, and peer collaboration and feedback. Participants are actively engaged in project design, with the expectation that every teacher or teaching team will generate a project plan that receives formative feedback from both participants and BIE National Faculty.</p> <p>All participants (limited to 35 per workshop) receive a free copy of BIE's highly regarded PBL 101 Workbook, which is exclusively for PBL 101 participants and not sold separately.</p>
Sustained Support Visits	<p>Sustained Support Visits are onsite instructional coaching events for participants who attended the PBL 101 Workshop. These visits are spaced throughout the school year following the 101, and are based on participant need. BIE conducts a survey of participating teachers and administrators and uses that data to develop a tailored session to support teachers in areas related to project design, assessment, and management.</p>

	BIE requires districts who partner with us contract for these onsite visits, as multiple studies have indicated the importance of ongoing support as a feature of successful professional development and transformation in teacher practice.
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Systemic Service Offerings

Service	Service Description
PBL Leadership Team Development Series	The PBL Leadership Team Development Series equips instructional leaders with the skills and knowledge needed to create the systemic conditions necessary for successful and sustainable PBL implementation. This series is a required feature of BIE's three-year implementation plans. Workshop participants should include district leadership, instructional coaches, department chairs, site leadership and teacher leaders. The 8-day series, usually spread over the course of one year, includes modules on key protocols, collegial conversations, analysis of student work, walkthroughs, data analysis, etc. Participation in any one workshop in the series is limited to 50.
Systemic Implementation Planning Workshop	<p>BIE supports systemic PBL implementation efforts by entering into partnerships with districts. These efforts begin by designing a flexible multi-year implementation plan during the full-day onsite PBL Implementation Planning Workshop. This fee-based planning workshop is the first step in the process. All members of the site-based leadership team work collaboratively with our <u>Director of Implementation</u> and a Systemic Partnership Coach to design the plan.</p> <p>During the session, we use our proprietary model to design a plan that has, as its central goal, the sustainable implementation of Project Based Learning. Plans take into account the needs of all stakeholders in the organization and leverage existing initiatives. BIE generates the plan and related budget within 10 days of the meeting's conclusion and submits it for partner approval. The plan is revised on semi-annual basis to ensure goals remain achievable.</p>
PBL Sustainability Program – Workshop Facilitation	The PBL Sustainability Program - PBL Workshop Facilitation is a structured apprenticeship that prepares local instructional leaders to facilitate their own world-class PBL workshops based on BIE's model. This program builds organizational capacity for Gold Standard PBL. Every candidate, chosen by the partner, is assigned one or more National Faculty members to guide him or her through the 6-

	<p>10 month program. Graduates of the program will receive access to and training on BIE's latest content, tools and techniques for the duration of the partnership. They will remain certified for two years following the end of the partnership. In order to continue receiving updated tools and materials, PBL Sustainability Program graduates will need to re-certify their status by attending PBL World or one of our PBL Academies.</p>
<p>PBL Sustainability Program – PBL Coaching Series</p>	<p>The PBL Sustainability Program - PBL Coaching Series is an eight-week online course that supports educators who provide PBL instructional coaching or leadership. It is required that participants have successfully completed a PBL 101 workshop prior to enrolling. Through a series of video samples, case studies, readings, and journaling, participants gain skills, strategies, and resources needed to support teachers and leaders with Gold Standard PBL implementation. Participation is asynchronous and includes discussion boards, a reflective journal, and a forum to ask questions and share best practices.</p>
<p>Systemic Partnership Coach (SPC)</p>	<p>Systems entering into a partnership with BIE work with a <u>Systemic Partnership Coach (SPC)</u> to support the creation of conditions that enable PBL. BIE believes in developing powerful personal relationships with its partners and working alongside a coach is one way we build the partner relationship. The SPC's manage BIE's work as outlined in the plan and provide the district PBL Steering Committee with a wide variety of tools from BIE's proprietary District Support Toolkit. In addition to providing the toolkit materials, SPC's provide onsite and virtual support to leaders, schedule BIE staff and National Faculty for services, arrange logistics of BIE's professional development events, generate reports, meet regularly (by phone) with the district PBL Steering Committee, tailor service components, and more. BIE's Systemic Partnership Coaches are drawn from some of the most experienced practitioners in our organization and put a friendly face on BIE's interactions with our partners.</p>
<p>Additional Days</p>	<p>In addition to the standard service length, you may wish to schedule additional consecutive days to the end of a service.</p>

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. Preliminary** _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:**
____ Academic
 Enrichment
____ Special Education
____ Support Services
____ Personnel
____ Legal
____ Facilities
- D. Action Items** _____
F. Board Policies **1st Reading** _____ **2nd Reading** _____

Approval of Amendment #1 to Agreement/MOU #17-30 – Hip Hop Mindset (Freeman/Thomas)

At the Board meeting of June 21, 2017, the Board of Trustees approved Agreement #17-30 with Hip Hop Mindset to provide Enrichment Activities for the period of June 21, 2017 through June 30, 2018 in the amount of \$45,000.00.

Amendment #1 in the amount of \$15,000.00 is to cover an increase in enrichment activities at schools in Oxnard School District, bringing the total contract amount to \$60,000.00. The increase will support the Hip Hop Mindset program operating in after school programs funded by the ASES grant. This increase is to be paid from the ASES account.

FISCAL IMPACT:

\$15,000.00 – ASES Grant Funds

RECOMMENDATION:

It is the recommendation of the Assistant Superintendent, Educational Services, and the Director, Curriculum, Instruction and Accountability, that the Board of Trustees approve Amendment #1 to Agreement/MOU #17-30 with Hip Hop Mindset.

ADDITIONAL MATERIAL(S):

Attached: Amendment #1 (1 Page)
Agreement/MOU #17-30, Hip Hop Mindset (1 Page)

**AMENDMENT #1 TO AGREEMENT #17-30
WITH HIP HOP MINDSET**

At the Board meeting of June 21, 2017, the Board of Trustees approved Agreement #17-30 with Hip Hop Mindset to provide Enrichment Activities for the period of June 21, 2017 through June 30, 2018 in the amount of \$45,000.00.

Amendment #1 in the amount of \$15,000.00 is to cover an increase in enrichment activities at schools in Oxnard School District, bringing the total contract amount to \$60,000.00. The increase will support the Hip Hop Mindset program operating in after school programs funded by the ASES grant. This increase is to be paid from the ASES account.

HIP HOP MINDSET:

OXNARD SCHOOL DISTRICT:

Signature

Signature

Typed Name/Title

Lisa A. Franz, Director, Purchasing
Typed Name/Title

Date

Date

**MEMORANDUM OF UNDERSTANDING AND RESPONSIBILITY #17-30
BETWEEN OXNARD SCHOOL DISTRICT AND
HIP HOP MINDSET, WILLIAM VENEGAS**

The scope of this document is to define the roles and responsibilities of Hip Hop Mindset, William Venegas (Consultant) in providing dance classes to students attending schools in Oxnard School District (District). The purpose is to provide enrichment opportunities for the students in Oxnard School District.

This serves as a Memorandum of Understanding and Responsibility (MOU) agreement that the District and Consultant will work together towards promoting a quality enrichment for students. Both the District and Consultant, according to its defined role, agrees to participate in coordinating, providing and financing the following services for the purpose of this agreement.

I. Consultant

A. Curriculum

1. Consultant will staff and provide hip hop dance instruction at schools in Oxnard School District.
2. Consultant will have staff sign into the school office as a visitor and check in with the Office Manager.

B. Fees

1. Total cost of program will not exceed \$45,000.00 including supplies and materials purchased by Consultant or District.
 - a. Any Supplies or materials purchased by Consultant shall have itemized receipts attached with monthly invoice.
 - b. Invoices will be submitted monthly for services provided. The last and final invoice shall be received by District no later than June 30, 2018.
2. Hourly fees will be charged at \$80 an hour.

C. Insurance and Clearance Requirements

1. Consultant agrees to carry an insurance policy that meets the requirements of the Oxnard School District Risk Management department that covers the dates of service of this agreement.
2. Pass a fingerprint screening as required by the Department of Justice.
3. Have on file with the District valid proof of negative tuberculosis test.

II. Oxnard School District agrees to:

1. Provide training space for the program.
2. Supply requested materials.
3. Support Hip Hop Mindset with live scan fingerprinting
4. Pay Hip Hop Mindset as outlined above.

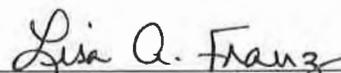
Hip Hop Mindset, William Venegas, will monitor this agreement to oversee implementation of project activity in coordination with the Manager of Special Programs. This Memorandum of Understanding and Responsibility agreement shall be effective upon signature and Board approval. The agreement will be in effect for the period of July 1, 2017 through June 30, 2018.

HIP HOP MINDSET:

OXNARD SCHOOL DISTRICT:



William Venegas



Lisa A. Franz, Director, Purchasing

Date

Date

6/9/2017

6-23-17



OXNARD SCHOOL DISTRICT

1051 South "A" Street • Oxnard, California 93030 • (805) 385-1501

AGREEMENT FOR NONPUBLIC, NONSECTARIAN SCHOOLING

AGREEMENT #17-266

THIS AGREEMENT, made and entered into this 21st day of March 2018 by and between the OXNARD SCHOOL DISTRICT, hereinafter referred to as the District, and the PROVO CANYON SCHOOL, INC., hereinafter referred to as the nonpublic, nonsectarian school.

WITNESSETH:

WHEREAS, the District is authorized by the provisions of the California Education Code, Section 56155 et seq., to contract with a nonpublic, nonsectarian school to provide services for certain pupils who are unable to benefit from regular education; and

WHEREAS, the District has determined, through evaluation and individual educational plans, that the following pupils are in need of such services;

Student:

AH112906

NOW, THEREFORE, in consideration of their mutual promises contained herein, the parties hereto enter into a fixed price contract as follows:

1. The nonpublic school will provide a program of instruction which is consistent with the pupil's individual educational plan as specified in the individual service agreement attached hereto and made a part hereof, and that the nonpublic, nonsectarian schools basic educational program and designated instruction and services shall be described in a written statement to be provided to the school district prior to the execution of this agreement.
2. The services shall be provided for the **2017--2018** school year at a cost of \$162/day for 112 days for basic education, \$195/day for 157 days for room and board, and \$96/day rate for 157 days for mental health services beginning January 2018; amount not to exceed **\$63,831.00.**
3. The nonpublic school shall keep attendance of each pupil daily and shall report attendance monthly to the school district. Such attendance records shall be kept in a California State school register and copies of such register shall be filed with monthly invoices to the district within thirty (30) days after the close of the school month. Separate attendance registers shall be submitted for all designated instruction and services.

4. The nonpublic school will notify the school district of any change in a pupil's placement and/or address within three (3) days after the nonpublic school is informed of such changes.

5. The nonpublic school will report within three (3) days to the school district if a pupil is removed from the school by the placement agency, parent or legal guardian, or if a pupil absents himself/herself from school without permission for more than five (5) consecutive school days. For the purposes of the contract, a parent is the natural or adoptive parent, legal guardian or surrogate parent appointed by the district of residence when the courts have removed the parents educational rights.

6. The nonpublic school shall notify the school district when a pupil is absent for five (5) consecutive school days because of illness. Notification will be in writing.

7. The nonpublic school will not be paid for excused absences due to changes in the ADA laws. These absences shall count as non-instructional days and not compensated at the daily rate.

8. The nonpublic school shall prepare and submit to the school district trimester progress reports, incident reports within 24 hours, year-end reports and other data required for the annual review on or before April 15 of the current school year. Forms for year-end and other required reports shall be provided by the school district via the computerized special education support program (SESP).

9. In consideration of the services to be rendered by the nonpublic, nonsectarian school, the district agrees to payment as follows:

All cost for this service, including intake, testing, tuition, and elective shall not exceed **\$63,831.00** for students listed on page one of this Agreement #17-266.

10. While engaged in carrying out and complying with the terms of this agreement, the nonpublic, nonsectarian school is an independent contractor and not an officer, agent, or employee of the district. The independent contractor will obtain a criminal record summary from the Department of Justice or a Department of Justice approved agency on all employees or contracted service providers who potentially have contact with students. This clearance will be completed prior to the person(s) first day of employment. No individual who has been convicted of a violent or serious felony as listed in subdivision C, of Section 1192.7 of the California Penal Code will be employed in any capacity that potentially involves contact with students. Nor will any person be employed who has been convicted of, or entered a plea of nolo contendere to charges of any sex offense as defined in Education Code 44011.

11. The school district may withhold payment to the nonpublic, nonsectarian school when, in the opinion of the district: (1) nonpublic school's performance in whole or in part, either has not been sufficient or is insufficiently documented, or: (2) nonpublic school has neglected, failed, or refused to provide information or to cooperate with the inspection, review or audit of the program conducted by nonpublic school or records relating thereto. The school district shall not withhold payments as specified in this paragraph unless the school district has notified the nonpublic,

nonsectarian school, in writing, that nonpublic, nonsectarian school has not performed as specified herein. The notice shall specify that nonpublic, nonsectarian school has fourteen (14) days to make the required corrections. If, after the expiration of the fourteen (14) days, nonpublic, nonsectarian school has not corrected the situation as specified in the district's notice, the affected payments will be withheld and this agreement may be canceled for cause.

12. During the entire term of this agreement and any extension or modification thereof, the nonpublic school shall keep in effect a policy or policies of liability insurance, including coverage of owned and non-owned automobiles operated by nonpublic school for the purposes of this agreement, of at least \$1,000,000 for each person and \$1,000,000 for each accident or occurrence from all damages arising out of death, bodily injury, sickness, or disease from any one accident or occurrence, and \$3,000,000 for all damages and liability arising out of injury to or destruction of property for each accident or occurrence. Not later than the effective date of this contract, the nonpublic school shall provide the District with satisfactory evidence of insurance, naming the District as additional insured, including a provision for a twenty (20) calendar day written notice to District before cancellation or material change, evidencing the above specified coverage. The Nonpublic school shall at its own cost and expense procure and maintain insurance under the Workers' Compensation Law of California. Said certificates shall specify that insurance shall not be canceled or changed in required limits unless the school district has been provided forty-five (45) days advance written notification of cancellation or change.

The nonpublic, nonsectarian school shall also maintain Workers' Compensation Insurance coverage as required by law.

13. This Agreement, or any of its rights, obligations, provisions, or conditions, may not be assigned by either party without the written consent of the party.

14. This Agreement may be amended by mutual agreement of the parties and may be terminated by either party upon twenty (20) days advance notification.

IN WITNESS WHEREOF, the parties hereto have set their hands on the day and year first above written.

Date

Lisa A. Franz, Director, Purchasing
Oxnard School District

Date

Layla Workman, Assistant Manager
Provo Canyon School Inc., Nonpublic, Nonsectarian School

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- Study Session: _____
Closed Session _____
- A-1. Preliminary _____
A-II. Reports _____
B. Hearings _____
C. Consent Agenda _____
- Agreement Category:
____ Academic
____ Enrichment
 X Special Education
____ Support Services
____ Personnel
____ Legal
____ Facilities
- D. Action Items _____
F. Board Policies _____ 1st Reading _____ 2nd Reading _____

Ratification of Agreement #17-277 - Ventura County Office of Education, Special Circumstances Paraeducator Services - SCP (Freeman/Sugden)

It is recommended that the Board of Trustees ratify the service agreements with Ventura County Office of Education (VCOE) for the 2017-2018 school year, to provide exceptional services to special education students that consist of support from Special Circumstances Paraeducators (SCP's), including Extended School Year.

Students 2017-2018:

JV120313	\$ 7,330.40	RR103108	\$ 7,114.80
MG111808	\$ 39,827.20	NC092306	\$ 27,400.80 <i>(Includes Bus Aide)</i>
KR071607	\$ 4,704.00 <i>(Includes Bus Aide)</i>	RS052408	\$ 22,402.80

FISCAL IMPACT:

\$108,780.00 - Special Education Funds

RECOMMENDATION:

It is the recommendation of the Director, Special Education Services, and the Assistant Superintendent, Educational Services, that the Board of Trustees ratify Agreement #17-277 with the Ventura County Office of Education for Special Circumstances Paraeducator Services (SCP's), in the amount of \$108,780.00.

ADDITIONAL MATERIAL(S):

Attached: Agreement #17-277, Ventura County Office of Education (6 Pages)



AGREEMENT

For Paraeducator Performing Special Circumstance Educational Support

This Agreement, effective January 24, 2018 is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the Oxnard School District, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, JV120313, a Special Education pupil who is a resident of DISTRICT and currently attends, Carl Dwire School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of Paraeducator performing Special Circumstances educational support through half of the school day, 165 min. daily.

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 30 day notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 1/24/2018 (IEP date= 12/19/2017), and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date: (including ESY, if applicable)	CURRENT: <u>2017-2018</u>	UPCOMING: <u>2018-2019</u>
	1/24/2018-6/7/2018	
	(ESY: 6/11/2018-6/29/2018)	
	\$ <u>7,330.40</u>	\$ _____

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

OXNARD SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By: [Signature]
Special Education Authorized Representative

Title: Director, Purchasing

Approved By: _____
Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ 7,330.40

Please submit **two** original copies Oxnard School District-Purchasing Department



AGREEMENT

For Paraeducator Performing Special Circumstance Educational Support

This Agreement, effective August 23, 2017 is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the Oxnard School District, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, MG111808, a Special Education pupil who is a resident of DISTRICT and currently attends Phoenix- Los Nogales School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of Paraeducator performing Special Circumstances Educational Support throughout the school day, 1605 minutes weekly.

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 30 days' notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 8/23/2017 (IEP date=3/2/2017), and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date: (including ESY, if applicable)	CURRENT: <u>2017-2018</u> (8/23/2017-3/2/2018)	UPCOMING: <u>2018-2019</u>
	\$ <u>39,827.20</u>	+

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

OXNARD SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By: [Signature]
Special Education Authorized Representative

Title: Director, Purchasing

Approved By: _____
Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ 39,827.20

Please submit **two** original copies Oxnard School District-Purchasing Department



AGREEMENT

For Paraeducator Performing Special Circumstance Services

This Agreement, effective December 15, 2017 is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the Oxnard School District, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, KR071607 a Special Education pupil who is a resident of DISTRICT and currently attends, Penfield School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of Paraeducator performing Special Circumstances services during transportation to and from school, 60 min a day.

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 45 days notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 12/15/2017 (IEP date), and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date:	CURRENT: <u>2017-2018</u> 12/15/2017-6/14/2018 (ESY: 6/18/2018-6/29/2018)	UPCOMING: <u>2018-2019</u>
(including ESY, if applicable)	\$ <u>4,704.00</u>	+ \$ _____

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

OXNARD SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By: [Signature]
Special Education Authorized Representative

Title: Director, Purchasing

Approved By: _____
Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ 4,704.00

Please submit **two** original copies Oxnard School District-Purchasing Department



AGREEMENT

For Paraeducator Performing Special Circumstance Services

This Agreement, effective January 18, 2018 is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the Oxnard School District, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, RR103108, a Special Education pupil who is a resident of DISTRICT and currently attends, Sunkist School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of Paraeducator performing special circumstance educational support through out the school day, 330 minutes a day.

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 30 days' notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 1/18/2018 (IEP date=2/23/2017), and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date: (including ESY, if applicable)	CURRENT: <u>2017-2018</u> <u>1/8/2018 - 2/23/2018</u>		UPCOMING: <u>2018-2019</u>
	\$ <u>7,114.80</u>	+	\$ _____

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

HUENEME ELEMENTARY SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By:  Special Education Authorized Representative

Title Director, Purchasing

Approved By: _____ Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ 7,114.80



AGREEMENT

For Paraeducator Performing Special Circumstance Educational Support

This Agreement, effective January 13, 2018 is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the Oxnard School District, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, NC092306, a Special Education pupil who is a resident of DISTRICT and currently attends Foster School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of Paraeducator performing special circumstance educational support throughout the school day (330 minutes a day) and during transportation to and from school (90 minminutes a day) for a total of 420 min daily. ESY will be calculated at 280 minutes a day.

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 45 days' notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 1/13/2018 (*IEP date*) and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date: (including ESY, if applicable)	CURRENT: <u>2017-2018</u>	UPCOMING: <u>2018-2019</u>
	<u>1/13/2018-6/8/2018</u>	
	(ESY: <u>6/11/2018-6/29/2018</u>)	
	\$ <u>27,400.80</u>	+ \$ _____

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

OXNARD SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By: 
Special Education Authorized Representative

Title: Director, Purchasing

Approved By: _____
Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ 27,400.80

Please submit **two** original copies Oxnard School District-Purchasing Department



AGREEMENT

For Paraeducator Performing Special Circumstance Educational Support

This Agreement, effective **January 11, 2018** is made by and between the Ventura County Office of Education, hereinafter referred to as SUPERINTENDENT, and the **Oxnard School District**, hereinafter referred to as DISTRICT.

1. This agreement pertains to providing exceptional service(s) for, RS052408, a Special Education pupil who is a resident of DISTRICT and currently attends Carl Dwire School a special education program operated by SUPERINTENDENT.
2. SUPERINTENDENT agrees to provide for the exceptional service(s) of such Special Education pupil as authorized by DISTRICT or its designee and agreed to by SUPERINTENDENT.
3. DISTRICT shall reimburse SUPERINTENDENT the actual cost of providing the exceptional service plus the state approved indirect cost rate of SUPERINTENDENT.

Authorized exceptional service(s) shall consist of **Paraeducator performing special circumstance educational support throughout the school day, 330 minutes daily. ESY will be provided at 240 minutes a day.**

4. DISTRICT acknowledges that certain types of expenses will continue to accrue during periods of student's absence from school, including but not limited to salary and benefits of staff providing the exceptional service(s). DISTRICT further acknowledges that if the exceptional service(s) includes the service(s) of SUPERINTENDENT's employee(s), 45 days' notice is required to layoff an employee for lack of work. Therefore, in the event the student unexpectedly leaves SUPERINTENDENT's program, SUPERINTENDENT will make every attempt to re-assign any staff involved in providing the exceptional service(s); however, if that is not possible, DISTRICT will reimburse SUPERINTENDENT for expense incurred throughout the layoff notice period.
5. DISTRICT does hereby agree to defend, indemnify and hold harmless the SUPERINTENDENT, the Ventura County Board of Education, and its officers, and employees from any and all claims, demands, liabilities, expenses (including attorneys' fees and costs of defense) arising as a result of SUPERINTENDENT's obligations under this agreement. However, this indemnification shall not apply if it is ultimately adjudicated that such claim, demand, liability or expense arose out of the sole negligence of the SUPERINTENDENT.
6. The term of this contract shall begin 1/11/2018 (IEP date) and continue thereafter on a continuing basis until the IEP of said student is modified or until student's district of residence changes.

FISCAL YEAR-based on IEP date: (including ESY, if applicable)	CURRENT: <u>2017-2018</u> 1/11/2018 - 6/7/2018 (ESY: 6/11/2018-6/29/2018)	UPCOMING: <u>2018-2019</u>
	\$ <u>22,402.80</u>	+

It shall be the responsibility of DISTRICT to notify SUPERINTENDENT of any change in district of residence or change in the IEP that would affect this contract.

IN WITNESS WHEREOF, the parties hereto have executed this agreement:

OXNARD SCHOOL DISTRICT

VENTURA COUNTY OFFICE OF EDUCATION

Signature Lisa A. Franz

Accepted By: [Signature]
Special Education Authorized Representative

Title: Director, Purchasing

Approved By: _____
Business Services Authorized Representative

Date: _____

Date: _____

Estimated Cost \$ **22,402.80**

Please submit **two** original copies Oxnard School District-Purchasing Department

OSD BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: 3/21/18

- Study Session:** _____
Closed Session _____
- A-1. **Preliminary** _____
A-II. **Reports** _____
B. **Hearings** _____
C. **Consent Agenda** _____
- Agreement Category:**
____ Academic
____ Enrichment
____ Special Education
X **Support Services**
____ Personnel
____ Legal
____ Facilities
- D. **Action Items** _____
F. **Board Policies** 1st Reading _____ 2nd Reading _____

Approval of Amendment #1 to Agreement #17-34 – American Logistics Company, LLC (Penanhoat/Briscoe)

At the Board meeting of June 21, 2017, the Board of Trustees approved Agreement #17-34 with American Logistics Company, LLC to provide home-to-school transportation for the period of August 1, 2017 through June 30, 2018 in the amount of \$25,000.00.

Amendment #1 in the amount of \$25,000.00 is to cover the additional cost of transporting Foster Youth, McKinney-Vento and Special Education students transported to public schools and residences outside of the District, bringing the total contract amount to \$50,000.00. The increase will be paid through the General Fund.

FISCAL IMPACT:

Not to exceed \$25,000.00 (\$65.00 per hour) – General Fund

RECOMMENDATION:

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services and the Director of Transportation, that the Board of Trustees approve Amendment #1 to Agreement #17-34 with American Logistics Company, LLC, in the amount not to exceed \$25,000.00 (\$65.00 per hour).

ADDITIONAL MATERIALS:

Attached: Amendment #1 (1 Page)
 Agreement #17-34, American Logistics Company, LLC (13 Pages)

**AMENDMENT #1 TO AGREEMENT #17-34
WITH AMERICAN LOGISTICS COMPANY, LLC**

At the Board meeting of June 21, 2017, the Board of Trustees approved Agreement #17-34 with American Logistics Company, LLC to provide home-to-school transportation for the period of August 1, 2017 through June 30, 2018 in the amount of \$25,000.00.

Amendment #1 in the amount of \$25,000.00 is to cover the additional cost of transporting Foster Youth, McKinney-Vento and Special Education students transported to public schools and residences outside of the District, bringing the total contract amount to \$50,000.00. The increase will be paid through the General Fund.

**AMERICAN LOGISTICS
COMPANY, LLC:**

OXNARD SCHOOL DISTRICT:

Signature

Signature

Typed Name/Title

Lisa A. Franz, Director, Purchasing
Typed Name/Title

Date

Date

AGREEMENT #17-34 FOR THE PROVISION OF ALTERNATIVE TRANSPORTATION SOLUTIONS

THIS AGREEMENT ("Agreement") is entered into as of July 01, 2017 between American Logistics Company, LLC ("Contractor") and Oxnard School District (the "District"), with the following facts:

- A. Certain student(s) of the District require transportation to and from school and/or other transportation services as requested by the District.
- B. Contractor will coordinate such transportation services. The District will reimburse Contractor for the provision of these services, in accordance with the terms and provisions of this Agreement.

NOW THEREFORE, for a valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Contractor Services

District may request, from time to time, that Contractor coordinate transportation services, which Contractor may agree to coordinate. To the extent accepted by Contractor, Contractor agrees to coordinate such transportation services and District agrees to pay Contractor in accordance with the provisions of this Agreement. Contractor's coordination of such transportation services pursuant to this Agreement are sometimes referred to herein as the "Services".

In operating under this Agreement, the District will purchase services from the Contractor through the Contractor's agreement with **National Intergovernmental Purchasing Alliance (IPA), Contract No. R141501**, the provisions of which, while not attached hereto, are nonetheless incorporated herein by this reference, and in accordance with the pricing set forth in Attachment 1 of this Agreement, which is attached hereto and incorporated herein by this reference.

2. Term

The initial term of this Agreement shall commence on July 01, 2017 and end on June 30, 2018. At the end of the initial term this Agreement will be automatically renewed for successive twelve (12) month periods (each a "Renewal Term") on the same terms and conditions unless either party provides the other with not less than thirty (30) days prior written notice that the Agreement should terminate at the end of its then current term. In addition, in the event of a material breach of this Agreement, either party may terminate this Agreement with thirty (30) day notice to cure to the breaching party. If the breach is not cured, this Agreement will terminate immediately following the thirty (30) day notification period.

3. Fees for Service

Contractor shall be paid the agreed sum based on fees outlined on Attachment 1, which is attached hereto and incorporated herein by this reference. Contractor shall invoice the District for the provision of the Services on a monthly basis and shall be paid therefore within thirty (30) days after the District's receipt of Contractor's invoice for the provision of the Services for the relevant week. Any payment not received by Contractor within said thirty (30) day period shall accrue interest at the lesser of (a) the rate of one and one-half percent per month or (b) the maximum rate allowed by law, commencing with the date of the invoice until payment is actually received by Contractor.

4. Vehicles

As part of its Services and for the compensation set forth in this Agreement, Contractor agrees to coordinate the supply of such vehicles (the "Vehicles") as may be necessary to lawfully address the transportation requirements of the District. The District requires that all such Vehicles shall fully comply with all applicable laws and regulations. Contractor shall be solely responsible for the management and logistical support necessary to coordinate all Vehicles used in transporting students.

5. Contractor Personnel and Independent Contractor Drivers

As part of its Services and for the compensation set forth in this Agreement, Contractor shall provide qualified and properly licensed personnel as required by laws and regulations and as deemed appropriate by Contractor to coordinate the Services. While Contractor may contract with independent contractor drivers who will provide actual transportation services for the District, Contractor shall at all times remain responsible for the coordination of the Services under this Agreement. Contractor expressly represents and warrants to the District that it will contract with independent contractor drivers that have obtained the necessary training and are properly licensed to perform the Services.

6. Contractor Insurance

Contractor shall obtain and maintain in full force and effect during the term of this Agreement, and at no cost to District, general liability and automobile (common carrier) insurance issued by insurance companies authorized to do business in the state with minimum limits of One Million Dollars (\$1,000,000), Combined Single Limit. The District shall be named as an additionally insured of the policy or policies and shall be furnished with a certificate of insurance (COI). The District shall be notified at least thirty (30) days prior to cancellation of any such policy or policies (except 10 days for non-payment of premium).

7. Background Checks

Because Contractor will be providing transportation services for school children, it is a requirement of Contractor's insurance that Contractor require and Contractor shall require each Contractor personnel or independent contractor driver in a position

requiring contact with students to undergo a background check verifying no prior convictions for or pleas of nolo contendere to a felony or misdemeanor offense involving moral turpitude, including any sexual offense involving a child.

8. Health and Safety (Tuberculosis Testing)

To the extent required under applicable law, rule or regulation applicable to the provision of Services and to the transportation services being provided by independent contractor drivers, Contractor shall require each Contractor personnel or independent contractor driver who may come in contact with student(s) to provide verification of having been tested for tuberculosis (TB) and cleared to work with students, as evidenced by a state licensed medical doctor's signature. As a service to District, Contractor will maintain a copy of said verifications.

9. Drug and Alcohol Testing

Contractor only contracts with transportation providers who enroll their drivers in a drug and alcohol testing consortium that provide for pre-employment testing, as well as random, reasonable suspicion and post-accident drug and alcohol testing. Each consortium reports to Contractor when a driver tests positive for a prohibited substance as well as when a driver is enrolled and removed from the consortium pool.

10. Assignment of Contractor's Rights

Except as it relates to the entering into of contacts with independent contractor drivers for the purpose of those independent contractors providing transportation services, Contractor shall have no right to assign its rights or obligations under this Agreement.

11. Indemnity of the District

Contractor hereby agrees to indemnify and hold the District, its Board Members, employees, agents, officers and assigns, free and harmless from and against all claims, causes of action, liabilities, damages, expenses and costs (including, but not limited to, attorney fees and court costs) arising out of (a) any injury to any person or property sustained by the District and/or Contractor and/or any student(s), in connection with the negligent provision of the Services that are to be provided by the independent contractor drivers pursuant to this agreement, and (b) any injury to any person or property sustained by any person or entity which is caused or alleged to be caused by any act, neglect, fault or omission on the part of Contractor or its agents, affiliates and independent contractors in connection with the provision of the Services, whether or not said injury or damage occurs on or off District property.

12. Independent Contractor

In providing the management and logistical support necessary to coordinate the Services, Contractor shall be and act as an independent contractor in all respects and shall not, for any purpose hereunder, be or act as an employee or agent of the District. Nothing contained in this Agreement shall be deemed to create a partnership or joint venture between either of the parties to this Agreement with each other. Contractor understands and agrees that as an independent contractor, it will not be eligible to

participate in any benefits or privileges given or extended by the District to its employees. Contractor shall be solely responsible for the payment when due to appropriate taxing authorities of all federal and state income taxes and related obligations of any nature whatsoever on any consideration paid pursuant to this Agreement, as well as any interest, penalties or other sums due thereon and shall indemnify, and hold the District, its Board Members, Officers, employees and agents free and harmless therefrom.

13. Non-Solicitation

District agrees during the term of this Agreement and for a period of twelve (12) months following the termination of this Agreement, District will not, directly or indirectly, or by acting in concert with others, employ, attempt to employ, or solicit for employment, any employee, independent contractor or other person who has performed services for Contractor at any time during the term of this Agreement.

14. Notices

All notices or other communication required or permitted hereunder shall be in writing, and shall be personally delivered (including by means of professional messenger service) or sent by registered or certified mail, postage prepaid, return receipt requested, or by facsimile or email transmission followed by delivery of a "hard" copy, and shall be deemed received upon the date of receipt thereof.

To District: Lisa A. Franz, Director, Purchasing
Oxnard School District
1051 South A Street
Oxnard, CA 93030
Phone: 805-385-1501 x2414
Email: lfranz@oxnardsd.org

To Contractor: Craig Puckett, President
American Logistics Company, LLC
901 Calle Amanecer, Ste. 260
P: 866.999.3371; Fax: 844.245.0299
Email: CPuckett@ALCSolutions.com

Notice of change of address shall be given by written notice in the manner detailed in this paragraph 14.

15. Entire Agreement

This Agreement, and Attachments 1-3 which are incorporated herein by this reference, and if applicable the attached proposal, constitutes the entire Agreement between the parties with respect to the provision of the Service and may not be amended except by a writing signed by each of the parties.

16. Waivers

The waiver by either party of a breach or violation of any provisions of this Agreement shall not operate as, or be construed to be, a waiver of any subsequent breach of this Agreement.

17. Attorney Fees

In the event that either party brings an action against the other to enforce any condition or covenant of this Agreement, the prevailing party in such action shall be entitled to recover the court costs and reasonable attorney fees in the judgment rendered in such action.

18. Severability

In the event any of the provisions, or portions, or portions thereof, of this Agreement is held to be unenforceable or invalid, by any court of competent jurisdiction, the validity and enforceability of the remaining provision or portion of it shall not be affected.

19. Further Acts

Each party shall perform any further acts and sign and deliver any further documents that are reasonably necessary to carry out the provisions of this Agreement.

20. Counterparts

This Agreement may be signed in one (1) or more counterparts, each of which shall constitute an original but all of which together shall be one (1) and the same document.

DISTRICT

By: Lisa A. Franz

Title: Director, Purchasing

Signed: Lisa A. Franz

Date: 6-22-17

CONTRACTOR

By: Craig Puckett

Title: President

Signed: _____

Date: _____

ATTACHMENT 1 - Fees for service

The Contractor will charge the District a **\$65 per trip fee** (this includes the first 12 miles) regardless of the number of students being transported (from 1 – 6* students, inclusive. Vehicle capacity is determined by student requirements and vehicle availability). An additional **\$2.50 per mile** will be charged for any trip longer than 12 miles.

The pricing matrix below outlines all associated fees:

Trip Items	Fees
Trip Fee (includes first 12 miles)	\$65.00
Per Mile Fee (after the first 12 miles)	\$2.50
Additional Fees** (as needed/requested):	
Wheelchair Fee (per student)	\$25.00
Car Seat/Safety Vest Fee (per student)	\$5.00
Wait Time Fee (per hour, billed in 15 min. increments)	\$60.00
Monitor Fee (per hour, 2-hour minimum)	\$25.00
No Show or Late Cancel	Full Price of Trip

Definitions:

Trip: A trip is defined as a one-way transportation event with a student or monitor continually on board. Examples include:

- Home to School:
 - Student 1: Pick-up, Student 2: Pick-Up
 - Both Student 1 & 2 dropped off at School A
 - Student 1: Pick-up, Student 2: Pick-up
 - Student 1 dropped off at School A
 - Student 2 dropped off at School B
- School to Home:
 - Student 1: Pick-up, Student 2: Pick-Up
 - Both Student 1 & 2 dropped off at Home A
 - Student 1: Pick-up, Student 2: Pick-up
 - Student 1 dropped off at Home A
 - Student 2 dropped off at Home B

The total number of trips a district is charged for is arrived at by adding together each one-way trip. The district will only be charged for miles incurred while a student or Monitor is onboard

the vehicle. When no student or Monitor is onboard the vehicle, no mileage charges will be incurred.

Additional Fees: Additional fees are only incurred per the request of the district to provide additional services. They can include, but are not limited to:

- **Wheelchair Fee:** A per student/per trip fee for students requiring a wheelchair vehicle
- **Car Seat/Safety Vest Fee:** A per student/per trip fee for students requiring a car seat/safety vest
- **Wait Time Fee:** Only incurred when authorized by the district to wait for a student. Billed on an hourly basis in 15 minute increments.
- **Monitor Fee:** Only incurred when the district requests that the Contractor provide a student Monitor for the trip. School districts usually provide the student's Monitor. When the district provides the Monitor, they are not charged a "Monitor Fee." The mileage incurred while a Monitor (whether provided by the Contractor or the District) is onboard the vehicle without a student (transporting the Monitor to and from their pick-up location) is considered part of the overall route mileage and will be billed accordingly.

1. Mileage Charges

Mileage charges are based on driving distance calculations from a third party provider (e.g. Google, MapQuest, Bing, ESRI). The calculations are based on fastest route, and the total is rounded up to the next whole mile. Contractor shall be responsible for plotting the routes collectively, and individually using Contractor's proprietary School Dispatch Software.

Under no circumstances will the District be required to pay for mileage to a pick up or destination other than those authorized by the District.

2. Fuel Surcharges

When the average gasoline price exceeds \$5.00 per gallon, the mileage rate will be increased by calculating 30% of the price of gasoline that exceeds \$5.00 and adding it to the base mileage rate. Thus, if the price of gasoline, according to the gasoline price index, is \$5.20, the increase would be 30% of 20 cents, or 6 cents. The gasoline price index to be used shall be found under the category of "[Your Specific State or Region] U.S. Regular Gasoline Prices* (dollars per gallon)" on the following website:

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_home_page.html

3. Invoicing

The invoice shall contain this level of detail and additionally will separate the charges by route showing number of days and total cost. A No Show Report will also be provided with the invoice showing the students who were not transported each day of the billing period. In the event of a No Show, the trip will be billed at the normal rate. The Contractor requires 24 hour notice to remove a student from the route.

4. When Routes Change or Students are Added or Removed

When it becomes necessary to change a route for any reason, including adding or removing students, Contractor shall plot the revised or new route using Contractor's School Dispatch Software as described above in the most efficient manner based on the information known to Contractor at that time.

Routes will be optimized from time to time as deemed necessary by Contractor or requested by the District. Routes will not be optimized more than once in a month.

If the District adds a Student to be transported, that Student may be individually transported until routes are optimized.

ATTACHMENT 2 – The District agrees that the following policies shall be followed related to Student No-Shows and Late Canceled trips for trips serviced by the Contractor

No-Shows & Late Cancels

A No-Show occurs when no previous notice is provided to the Contractor by the District/guardian that a student will not be transported and a driver attempts to pick-up a student but the student is not there or is not ready. A Late Cancel occurs when less than 2-hour notice is provided to the Contractor by the District/guardian that a student will not need transportation.

Trips where a No-Show or Late Cancel occurs are billed at full trip charge.

Possible District Protocols for No-Shows:

If the driver attempts to pick-up a student on a scheduled trip in the AM but the student is not there or not ready, then the following scenarios could apply (as determined by the district):

1. Single Rider Trips

- a. If an AM single rider No-Show occurs, the District will be billed for the AM trip and the afternoon trip will remain scheduled unless the Contractor is notified by the parent or the District to cancel the trip.
 - i. The District may set up a protocol to automatically cancel afternoon trips in the event of an AM Single Rider No-Show
- b. If the afternoon trip is cancelled within 2 hours of the scheduled pick up time, the district will not be billed for the afternoon trip.

2. Multiple Rider Trips

- a. The afternoon trip always remains scheduled.

No-Show Reports

Each morning an email is sent from the Contractor's School Dispatch team to the District. This email is sent by 11 AM and alerts the District of the following circumstances:

- Which students were no-shows that morning
- How many consecutive days/trips they have been a no-show

The daily No-Show Report provides the District time to inform the Contractor's School Dispatch if one of the students on the No-Show Report is attending school that day and will still need a ride home in the PM.

The District is responsible for alerting the Contractor of any change requests based on the data provided in the No-Show Report, such as removing a student from a route due to multiple no-shows.

Student Removal / Student Cancellation:

Permanent Removal of Student from Route:

Permanent removal of a student from a route requires District notification/approval

- The District sends an email stating that a student needs to be removed from a route until further notice.

Impact:

Once the student is removed from the route, the student's spot is now gone and may be replaced with a different student, if available, to consolidate routes. If the student was the only one on that route, the route will be removed entirely and the driver then becomes available to service other routes.

Billing:

Will only be affected if:

- Trip is above the minimum and there is a reduction in the mileage as a result of removing the student.
- The student was the only one on the route, therefore the route is cancelled.

Cancellations/Temporary Removal:

Cancellation of a student from a route requires District notification/approval.

- A student is sick one day or will be going on vacation for a few days.

Impact:

Because this is a temporary change, the student is not replaced on the route and their space on the route is reserved for their return.

Billing:

If the student is a single rider and the student is cancelled or temporarily removed, no charges will be assessed. When cancelling or temporarily removing the pick-up/drop-off for a student who is part of a multiple rider trip, the district will be charged the normal trip rate.

ATTACHMENT 3 – Multi-District Billing: An Explanation

Should The District choose to share trips with a neighboring school district that is also under contract with ALC, the shared trip will be prorated and billed according to the following explanation?

Proration of Trip Fees – ALC’s Three Step Process

1. Stand Alone District Trips:

Each districts’ students are routed as stand-alone trips, district specific pricing is applied.

a. Example:

- i. District A has two students who routed together cost the district \$65 (Trip 1)
- ii. District B has a single student whose trip would cost the district \$80 (Trip 2)

2. Multi-District Trips

All of the students from the participating districts, as identified above, are combined into the most cost effective trips, yielding new “Multi-district trips” and subsequent trip costs.

a. Example (cont.):

- i. When all three students are routed together, the total trip cost is \$95

3. Proration of Costs for Multi-District Trips

The total cost of the multi-district trips is then allocated to each district based upon the percentage of the districts stand-alone trip costs (found in step 1) as compared to the multi-district trip costs (found in step 2).

Example (cont.):

o Blended Cost of Multi-District Trip = \$95

- Stand Alone Cost of Trip for District A = \$65
- Stand Alone Cost of Trip for District B = \$80

i. District A’s Percent Responsibility = $\text{Trip A} / (\text{Trip A} + \text{Trip B})$

1. $\$65 / (\$65 + \$80)$

a. $\$65 / \$145 = 44.83\%$

2. $44.83\% \times \$95 = \42.59

3. **District A’s Prorated Cost = \$42.59**

a. District A’s Savings = \$22.41

ii. District B's Percent Responsibility = Trip B/(Trip A + Trip B)

1. $\$80/(\$65 + \$80)$

a. $\$80/\$145 = 55.17\%$

2. $55.17\% \times \$95 = \52.41

3. **District B's Cost = \$52.41**

a. District B Savings = \$27.59

4. No Shows and Cancellations:

For the purpose of all Multi-District Trips, No Shows and Cancellations are applied to each district invoice as if the student had boarded the vehicle on schedule even if district notifies ALC with advanced notice of cancellation.

5. Invoicing

The invoice shall separate the charges by route showing number of days and total cost. A No Show Report will also be provided with the invoice showing the students who were not transported each day of the billing period. In the event of a No Show, the trip will be billed at the normal rate. 24 hour notice is required to permanently remove a student from a route.

6. When Routes Change or Students are Added or Removed

When it becomes necessary to change a route for any reason, including adding or removing students, Contractor shall plot the revised or new route using Contractor's School Dispatch Software as described above in the most efficient manner based on the information known to Contractor at that time.

Routes will be optimized from time to time as deemed necessary by Contractor or requested by the District. Routes will not be optimized more than once in a month. If the District adds a Student to be transported, that Student may be individually transported until routes are optimized.

Oxnard District Contacts
(Please complete this form and return as soon as possible)

To whom should contract notices be sent?

Name & Title: Lisa A. Franz, Director of Purchasing
Address: 1051 South A Street
City: Oxnard State: CA Zip: 93030
Email: lfranz@oxnardsd.org Fax: 805-240-7582

Who should our accounting personnel contact regarding accounts payable matters?

Name & Title: Kathy Houchen, Accountant/Internal Auditor
Email: kbeasley@oxnardsd.org
Phone: 805-385-1501, Ext. 2457 Fax: 805-483-7226

Who should our dispatchers contact regarding routine transportation matters?

Name & Title: Transportation Staff
Email: transportation@oxnardsd.org
Phone: 805-385-1519 Fax: 805-486-2494

Who should our dispatchers contact regarding emergencies, accidents or student behavior?

Name & Title: Transportation Staff Emergencies Accidents Behavior
Email: transportation@oxnardsd.org
Phone: 805-385-1519 Fax: 805-486-2494

Who should we email the No-Show Report to each morning?

Name & Title: Transportation Staff
Email: transportation@oxnardsd.org

BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: 03/21/18

STUDY SESSION _____

CLOSED SESSION _____

SECTION A-1: PRELIMINARY _____

SECTION A-II: REPORTS _____

SECTION B: HEARINGS _____

SECTION C: CONSENT AGENDA X _____

Agreement Category:

_____ Academic

_____ Enrichment

_____ Special Education

_____ Support Services

_____ Personnel

_____ Legal

_____ Facilities

SECTION D: ACTION _____

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

SETTING OF DATE FOR PUBLIC HEARING – SCHOOL FACILITIES NEEDS ANALYSIS (Penanhoat)

It is appropriate that the Board of Trustees set the date of Wednesday, April 18, 2018, for:

- 1) A public hearing on the School Facilities Needs Analysis Report and Level 2 fees; and
- 2) Consideration of a resolution concerning development fees on residential projects within the District's boundaries.

The hearing will take place in the Board Room at the Educational Service Center.

FISCAL IMPACT

N/A

RECOMMENDATION

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees set the date of Wednesday, April 18, 2018, for a public hearing on the Oxnard School District 2018 School Facilities Needs Analysis Report.

ADDITIONAL MATERIAL

Attached: Notice of Public Hearing (1 page)



OXNARD SCHOOL DISTRICT

1051 South A Street • Oxnard, CA 93030 • (805) 385-1501 • www.oxnardsd.org

PUBLIC NOTICE

Oxnard School District Establishment of Alternative School Facilities Fees

PLEASE TAKE NOTICE that the Oxnard School District intends to conduct a public hearing on its School Facilities Needs Analysis at a regular meeting of the Board of Trustees on April 18, 2018 at 7:00 pm, or as soon thereafter as this matter may be heard, in the Board Room of the Educational Service Center located at 1051 South A Street, Oxnard, CA 93030.

PLEASE TAKE FURTHER NOTICE that following the public hearing, the Board of Trustees of the Oxnard School District will consider a resolution to adopt its School Facilities Needs Analysis and to establish alternative fees on new residential development as authorized by Government Code Sections 65995.5, 65995.6, and 65995.7, and Education Code Section 17620.

The School Facilities Needs Analysis is available for review and copying at the District's administrative office during normal business hours. The District's administrative office is located at 1051 South A Street, Oxnard, CA 93030.

Information concerning this matter is available from the Assistant Superintendent of Business & Fiscal Services at (805) 385-1501, ext. 2401

BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: 03/21/18

- STUDY SESSION _____
- CLOSED SESSION _____
- SECTION A-1: PRELIMINARY _____
- SECTION A-II: REPORTS _____
- SECTION B: HEARINGS _____
- SECTION C: CONSENT AGENDA X

- Agreement Category:
- _____ Academic
 - _____ Enrichment
 - _____ Special Education
 - _____ Support Services
 - _____ Personnel
 - _____ Legal
 - _____ Facilities

SECTION D: ACTION _____

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

SETTING OF DATE FOR PUBLIC HEARING – INCREASE OF STATUTORY SCHOOL FACILITIES FEES (Penanhoat)

It is appropriate that the Board of Trustees set the date of Wednesday, April 18, 2018, for:

- 1) A public hearing on the “Residential Development School Fee Justification Study for Oxnard School District” and “Commercial/Industrial Development School Fee Justification Study for Oxnard School District” (“*Fee Studies*”) ; and
- 2) Consideration of a resolution concerning adopting the Fee Studies and increasing statutory school fees on new residential and commercial/industrial development within the District’s boundaries as authorized by Education Code Section 17620 and Government Code Section 65995.

The hearing will take place in the Board Room at the Educational Service Center.

FISCAL IMPACT

N/A

RECOMMENDATION

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, that the Board of Trustees set the date of Wednesday, April 18, 2018, for a public hearing on the increase of statutory school facilities fees as outlined above.

ADDITIONAL MATERIAL

Attached: Notice of Public Hearing (1 page)



OXNARD SCHOOL DISTRICT

1051 South A Street • Oxnard, CA 93030 • (805) 385-1501 • www.oxnardsd.org

PUBLIC NOTICE

Oxnard School District Increase of Statutory School Facilities Fees

PLEASE TAKE NOTICE that the Oxnard School District intends to conduct a public hearing on its "Residential Development School Fee Justification Study for Oxnard School District" and "Commercial/Industrial Development School Fee Justification Study for Oxnard School District" ("Fee Studies") at a regular meeting of the Board of Trustees on April 18, 2018 at 7:00 pm, or as soon thereafter as this matter may be heard, in the Board Room of the Educational Services Center located at 1051 South A Street, Oxnard, CA 93030.

PLEASE TAKE FURTHER NOTICE that following the public hearing, the Board of Trustees of the Oxnard School District will consider a resolution to adopt its Fee Studies and to increase statutory school fees on new residential and commercial/industrial development as authorized by Education Code Section 17620 and Government Code Section 65995.

The Fee Studies are available for review and copying at the District's administrative office during normal business hours. The District's administrative office is located at 1051 South A Street, Oxnard, CA 93030.

Information concerning this matter is available from the Assistant Superintendent of Business & Fiscal Services at (805) 385-1501, ext. 2401

OSD BOARD AGENDA ITEM

Name of Contributor: Robin Freeman

Date of Meeting: 3/21/18

- | | | | |
|--------------|--|-------|-------------------------------------|
| | Study Session: | _____ | |
| | Closed Session | _____ | |
| A-1. | Preliminary | _____ | |
| A-II. | Reports | _____ | |
| B. | Hearings | _____ | |
| C. | Consent Agenda | _____ | Agreement Category: |
| | | | ___ Academic |
| | | | <u>X</u> Enrichment |
| | | | ___ Special Education |
| | | | ___ Support Services |
| | | | ___ Personnel |
| | | | ___ Legal |
| | | | ___ Facilities |
| D. | Action Items | _____ | |
| F. | Board Policies 1st Reading | _____ | 2nd Reading _____ |

Approval of Overnight Field Trip and Agreement #17-280 – Camp Whittier (Freeman/Perez)

6th grade students from Chavez School will attend a four-day overnight field trip at Camp Whittier during the period of May 22-25, 2018.

Camp Whittier works with a group of trained and highly experienced local naturalists and challenge course facilitators to be able to offer top-notch outdoor education programs for schools and youth groups which can be tailored to meet 6th grade Science curriculum. Students will experience learning opportunities such as team building activities, focus on group dynamics and the individual's role in the group. Students are encouraged to challenge themselves to reach new heights by scaling high ropes. Students learn a variety of skills including weaving yucca cordage, archery, and shelter building. In teaching Astronomy, the program staff give students a systems perspective of the night sky, identifying major constellations and sharing stories about how they got their names. Groups are guided through the process of coming up with a skit, preparing, practicing, then performing before the large group at the final night's campfire.

FISCAL IMPACT:

There is no impact to the General Fund. Costs are \$250.00 per student, \$160.00 per district staff member, and the total including insurance and round-trip school bus transportation is not to exceed \$16,000.00. Costs will be paid from Chavez ASB funds.

RECOMMENDATION:

It is the recommendation of the Principal, Chavez School, and the Assistant Superintendent, Educational Services, that the Board of Trustees approve the Overnight Field Trip and Agreement #17-280 with Camp Whittier, at no cost to the district.

ADDITIONAL MATERIAL:

Attached: Agreement #17-280, Camp Whittier (9 Pages)



Camp Whittier
 2400 Hwy. 154, Santa Barbara, CA 93105
 (805) 962-6776
 www.campwhittier.org



Camp Whittier Reservation Contract

Group Name: Cesar E. Chavez Elementary School

Retreat Name: 6th Grade Outdoor Education Camp

Mailing Address: 301 North Marquita St., Oxnard, CA 93003

Contact: Derek Olson, Asst. Principle

Email: dolson@oxnardsd.org

Phone: 805-385-1524 x3221

Alt. Phone:

Early arrival date:

Early arrival guaranteed # of guests:

Main Group arrival date: Tue, May 22, 2018

Minimum guaranteed # of guests: 62

Departure date: Fri, May 25, 2018

Early arrival time:

Early arrival guaranteed # of meals per guest:

Main Group arrival time: 10:00am

Minimum guaranteed # of meals per guest: 10

Departure time: 1:00pm

Mode of transportation:

Bus Vans Multiple Personal Vehicles

Orientation time: TBD

Meal Schedule: TBD based on program schedule

Standard Meals	Standard Time	Alternative Meals	Alternative Time
Breakfast	8:00am		
Lunch	12:30pm		
Dinner	6:00pm		

Week 1	Breakfast	Lunch	Dinner	Week 2	Breakfast	Lunch	Dinner
Monday				Monday			
Tuesday		62	62	Tuesday			
Wednesday	62	62	62	Wednesday			
Thursday	62	62	62	Thursday			
Friday	62	62		Friday			
Saturday				Saturday			
Sunday				Sunday			

Facilities Use:

	Creek Cabins	NOT AVAILABLE
X	Creek Lodge	
X	Canyon Cabins	
X	Canyon Lodge/Dorms	
	Wilderness Cabins	NOT AVAILABLE
	Pool	
	Archery Range	
	Challenge Course	
	Kitchen Rental	



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Special Requests and Notes:

Total below is the minimum guaranteed fee per this contract. Camp Whittier will provide a final invoice to account for any additional guests and/or charges incurred.

Item	Quantity	Cost/Unit (\$)	Total Cost (\$)
3 nights lodging per person rate	62	60	\$3,720.00
10 meals per person	62	100	\$6,200.00
Outdoor Education Program	52	90	\$4,680.00
		Total:	\$14,600.00

Contract Total Due Date: APRIL 22, 2018

FINAL INVOICE WILL BE DUE UPON RECEIPT

Security Deposit: To be used for any damages incurred. After contract is completed, any remaining security deposit amount may be rolled over to the next retreat reservation, can be refunded or applied to final balance due.

Item	Quantity	Cost/Unit (\$)	Total Cost (\$)
Security Deposit	1	\$1,000.00	\$1,000.00
		Total:	\$1,000.00

Security Deposit Due Date: AS SOON AS POSSIBLE

Payments: Payable by check, cash, or credit card (3.5% processing fee applies to all credit card transactions.)
 Checks and Money Orders can be made out to **"UBGC of SB" OR "Camp Whittier"**.
 Mail payments to 2400 Hwy. 154, Santa Barbara, CA 93105

Contract Minimums and Cancellation Policy:

Upon signing this contract you agree to pay for a minimum of above stated fees per person. Additional participants and meals can be added with approval from the Camp Director and at least two weeks' written notification. A security deposit and signed contract are required in order to secure a requested date. The security deposit is nonrefundable if you cancel your reservation 90 days or less prior to your stay. The following refund amounts apply to full or partial reservation cancellations:

Days Prior To Reservation Start	Refund Amount per Meal/Night/Program	Refund Amount for Total Cancellation
>91 days	100%	100% minus \$350 from deposit
61-90 days	80%	80% minus full deposit
31-60 days	60%	60% minus full deposit
14-30 days	40%	40% minus full deposit
0 to 13 days	0%	0% minus full deposit

Authorized Signature Group Representative: _____ DATE: _____
 Lisa A. Franz, Director, Purchasing



Camp Whittier Rules and Regulations

1. There is a land line phone available for emergencies only in the camp office and in our staff housing. Cell phone reception at camp is not consistent or reliable.
2. In case of an emergency, an alarm will sound throughout camp. If the alarm is disabled camp staff will knock on cabin doors. If you hear an alarm, report to the main field below the pool for further instruction.
3. Please take note of the maps, emergency notices, warnings and information posted in cabins, at kiosks and at camp office.
4. There are no public computers or Wi-Fi access at camp.
5. Use of the kitchen, including the walk-in refrigerator, is only by previous approval from the Camp Director. Fees may apply.
6. Special dietary restrictions must be submitted to the camp staff for approval. All special meal requests must be submitted in writing with at least two weeks' notice. We may not be able to accommodate all requests.
7. Bedding and toiletries are not provided by the camp. Toilet paper is provided in all restrooms. Hand soap and paper towels are available in public restrooms excluding the Wilderness Cabins.
8. Only use those building specifically assigned to you. Please be respectful to other user groups.
9. No tacks, nails, staple gun or duct tape on or in buildings or trees in camp. Do not attach anything to the fans at camp. No tape on any walls or painted surfaces at camp. If paint from any surface is removed from the use of tape, the user group will incur a charge.
10. It is discouraged to have food in the sleeping areas. If you have food in your cabin, you may attract ants or small animals.
11. All personal sports equipment brought into camp should be stored and handled safely by rental groups to ensure the protection of all people.
12. When using Camp Whittier provided equipment, please return to proper storage location and notify camp staff of any damage or loss.
13. The following items are not permitted in camp:
 - a. Pets except service animals with current copy of immunization records
 - b. Candles
 - c. Gum and balloons (which can harm wildlife if left out)
14. If you are hiking please remember:
 - a. Potential hazards found on our property include poison oak, ticks, snakes, mountain lions, and other wildlife such as skunks, wasps, and bobcats. Be respectful of plants and animals you encounter.
 - b. Stay on trails for your safety and the preservation of the environment.
 - c. Do not leave trash behind you on the trail. Pack all trash with you and dispose of it in trash receptacles.
15. Vehicles in Camp:
 - a. The speed limit throughout camp is 4mph.
 - b. Please reduce the amount of driving through camp for safety of all campers. Exceptions are made for transporting campers with physical challenges.
 - c. If vehicles are parked in camp, they must not be blocking any roadways.
 - d. All vehicles must be driven by a licensed driver with current insurance.
 - e. All vehicles must stay on roadways – no off-road driving permitted.
 - f. At no time are passengers allowed in the beds of trucks or hanging onto the sides of vehicles. All passengers should be seated while the vehicle is moving and be wearing seatbelts.
 - g. There is limited parking at the Camp Office and overflow parking in the Oak Grove. We recommend limiting the number of vehicles parked in the camp.



Camp Whittier
 2400 Hwy. 154, Santa Barbara, CA 93105
 (805) 962-6776
 www.campwhittier.org



- 16. Smoking is only permitted in one area of camp - in the gravel area front of the Dining Hall next to the fire pit. All cigarette butts must be put in the pits or cigarette can. Smoking is permitted inside personal vehicles.
- 17. Please put all trash into cans and separate recyclables.
- 18. Please do not place any stakes into the main field without approval as this could damage the sprinkler system.
- 19. Quiet hours are 10:00pm-7:00am. Please be respectful of our camp staff and other user groups.
- 20. Upon Departure:
 - a. The user group agrees to leave the camp, cabins and bath/shower rooms in the condition found.
 - b. Trash is to be picked up and cabins floors are to be swept, etc. according to the Camp Check Out sheet provided.
 - c. Any additional work, cleaning or restoration which must be completed by Camp Whittier staff due to rental group negligence will be billed at **\$150/hour plus cost** of any materials needed.

I have read and agree to the above rules for our group's use of Camp Whittier. I further agree to communicate these rules to all members of my party.

 Authorized Signature Group Representative

 Date Signed

Lisa A. Franz
 Print Name

Director, Purchasing
 Title

Oxnard School District/Chavez Elementary School
 Group/Organization Name

May 22, 2018 - May 25, 2018
 Event Date



Camp Whittier
 2400 Hwy. 154, Santa Barbara, CA 93105
 (805) 962-6776
 www.campwhittier.org



Camp Whittier Use Agreement

User Group Insurance

- 1) User group agrees to provide proof of the following form of insurance at least five (5) days prior to the arrival at camp: **COMPREHENSIVE GENERAL LIABILITY INSURANCE** with minimum limits of \$1,000,000 personal injury, sickness, or death per any one occurrence and \$1,000,000 for loss or damage of property per any one occurrence.
- 2) User group shall have the UNITED BOYS & GIRLS CLUBS OF SANTA BARBARA COUNTY named as additional insured on user's Comprehensive General Liability Insurance policies for the period user group is using camp facilities.
- 3) It is understood and agreed that any insurance provided by user group in accordance with agreement shall be deemed primary insurance and shall not look to any insurance of the UNITED BOYS & GIRLS CLUBS OF SANTA BARBARA COUNTY for contribution.

User Group Agrees:

- 1) To observe all rules of the County of Santa Barbara and the U.S. Forest Service, including those that provide that no wood be cut, and no fires or smoking be allowed except in designated areas.
- 2) To abide by the Camp Whittier Rules and Regulations.

3) **Pool/ Swimming:** The pool is off-limits unless the user group provides lifeguard services equivalent to those defined in Section 116028 of the California Health and Safety Code, and American Camp Association section PA-3, which states:

- There shall be a designated aquatics supervisor who is at least 18 years of age and who shall possess an American Red Cross Lifeguard Certificate, YMCA Swim Lifesaving Certificate or its equivalent certificates.
- Lifeguard service shall be provided at a ratio of 1 lifeguard for each 25 campers in the water.
- In addition to providing a certified lifeguard, will also provide a "lookout" that will be on duty with the certified lifeguard at all times when the pool is in use. Pool usage must be approved ahead of time by management.

4) **Camper Supervision:** The user group is responsible for all supervision of attendees and for supervising any specialized activities for the duration of the contract and agrees to obtain appropriate screening for all staff who are responsible or may come in contact with minor campers including a criminal background check and a check of the National Sex Offender Public Website. User group also agrees to provide adult supervision in each cabin as well as ensure the proper ratios for camper supervision. Camp Whittier recommends the following supervision ratios:

4-to 5-year-old day campers	1:6	for overnight campers	1:5
6- to 8-year-old day campers	1:8	for overnight campers	1:6
9- to 14-year-old day campers	1:10	for overnight campers	1:8
15- to 17-year-old resident campers	1:12	for overnights	1:10

Exceptions to the above ratios are noted in the policies for swimming, archery, and ropes course. The user group is advised to evaluate their program and determine times when at least two staff members are required to be present, such as overnight and evening programs, showers, rest time, or when it is not easy to get help in the event of an emergency, etc.

At least 80% (100% for camps primarily serving persons with special needs) of the staff/camper ratios established need to be staffed by persons age 18 and older. All staff is at least 16 years of age and at least two years older than the minors with whom they are working.

In the event of an emergency when the ratios may not be met, use your best judgement. Utilize older campers and the intercom/walkie talkie when necessary. Any group shall advocate a no-bullying policy and have protocols and supervision to prevent bullying and inappropriate actions by members of the camp.

5) **Medical:** To require participants in a supervision position to be trained in age-appropriate CPR/AED certified by the American Red Cross, American Heart Association or another nationally recognized certification for emergency medical needs. For youth groups (children under age eighteen (18) who are unaccompanied by a parent or guardian), participants in a supervision position should be trained in age-appropriate first aid certified by a nationally recognized provider.



6) **Emergencies:** To have emergency transportation available if necessary. It is the user group's responsibility to provide all necessary emergency care, first aid, equipment, staff, supervision and transportation during an emergency, except when it is deemed appropriate that this be provided by community emergency response personnel. Camp Whittier recommends that the user groups compile a list of all participants that include emergency names and contact numbers, medications, allergies, health conditions requiring treatment, restrictions, and permission to treat. Camp Whittier also advises participants to come prepared with a list of all participants with their emergency contacts, and have available first aid supplies, and/or first aid equipment. User groups must get signed permission to seek emergency treatment or a signed religious waiver for minors without a parent on site. Information will be given to user groups concerning emergency procedures and reporting requirements. User groups are also responsible to notify camp director in all emergency situations.

7) **Kitchen Rental Policy:** Only applicable to groups who have specifically added kitchen rental to their rental contract. User group agrees to take on all responsibility and liability for food prepared and served in the kitchen, as well as for the safety of staff and campers utilizing the kitchen area and equipment under their direction. User group will be provided with a basic orientation to the kitchen but is responsible to have an experienced ServSafe or equivalently certified staff or camper managing the kitchen during their rental. User group is expected to follow all posted directions for kitchen procedures, including but not limited to dishwasher use, refrigerator storage, sanitizing, and hand-washing. All surfaces must be cleaned and rinsed. This includes walls, storage shelves, and garbage containers. Proper cleaning and sanitizing methods are to be used on all surfaces, utensils, equipment, etc. General guidelines for the effective use of Chlorine, Iodine, and Quats is to be followed. It is expected that the kitchen will be left in the same condition concerning cleanliness and functionality at the end of the user group's stay as it was when they arrived. Additional fees beyond the standard cleaning fee designated in the reservation contract will be collected should Camp Whittier require more than reasonable time to clean or repair the kitchen or any equipment after the user group's stay.

8) To pay any damage to camp property during occupancy of camp facilities, other than normal wear and tear, which are discovered during the departure inspection by the director of Camp Whittier. Camp Whittier shall have no obligation to identify the member or members of the user group responsible for the damage. The user group is responsible for the supervision and the behavior of attendees. The camp facilities will be inspected by the camp director prior to the arrival of the user group and will be re-inspected prior to or immediately after user group's departure. The initial inspection will be considered correct unless variances are noted in writing by the user group leader and presented to the camp director within two hours of arrival. The user group agrees to leave the camp, cabins and bath/shower rooms in the condition that it was found, clean and swept upon departure.

9) It is understood and agreed that no weapons of any kind or illegal drugs are permitted on the premises. Alcohol may be consumed on camp property by those over 21 years of age when an Alcohol Waiver has been signed.

10) To pay deposits, security deposit, and camp rental fees upon agreed upon payment schedule. User group agrees to pay all invoices on time, pay 1-1/2 % per month for an annual rate of 18% service charge on past due amounts and pay court costs, and/or reasonable attorney's fees, or both, if collection is necessary through process of suit.

11) User group is not permitted the use of the archery range, any ropes course equipment, low or high, unless contracted with Camp Whittier and under the supervision of a certified facilitator.

12) User group is responsible to provide their own wood for campfires and for use in the dining hall fireplace unless otherwise available from Camp Whittier per Camp Director. User group is responsible to prepare and completely put out their own campfires to prevent any possibility of a wildfire. Camp Whittier reserves the right to deny the option for a campfire due to high fire danger.

13) The user group understands that this is a closed facility. Only guests who have paid camp's fee may use the property. Any intruders must kindly be explained that we do not let people walk around camp for safety reasons, especially when people were in camp. Someone must escort the intruder to the office. The Camp Director reserves the right to eject any individuals from the property who have not paid the camp's fee as well as anyone who is acting in a destructive or belligerent manner that negatively affects the camp staff or could cause damage to property.



Camp Whittier
 2400 Hwy. 154. Santa Barbara, CA 93105
 (805) 962-6776
 www.campwhittier.org



Hold-Harmless Agreement

User group shall indemnify, hold free and harmless, assume liability for and defend Camp Whittier, its chartered affiliates, agents, servants, employees, officers, and directors from any and all costs, and all other sums, which the camp, its chartered affiliates are obligated to pay on account of any, all and every demand for, claim or assertion of liability, or any claim or action founded thereon, arising or alleged to have arisen out of user group's use of real or personal property belonging to Camp Whittier, its chartered affiliates, agents, servants, employees, officers and directors, or omission by user group, its members, agents, servants, employees, officers or directors.

Camp Whittier Agrees:

- 1) To provide administrative assistance and maintenance for the period contracted.
- 2) To provide food service for the period contracted, unless otherwise indicated in the contract.
- 3) To be able to cancel this agreement for other than breach of these terms upon reasonable notice. Reasonable notice is defined as soon as possible upon becoming aware of a circumstance which results in cancellation. All efforts will be made to give as much notice as possible.
- 4) To provide certified facilitator staff for any contracted specialized recreational activities such as archery or ropes course unless the group has agreed to provide their own certified staff with documentation.

Termination and "Acts of God"

1) **Termination:** User shall have the right to terminate the Use Agreement only on the following terms and conditions: In the event that User, in its sole discretion, is unable to fulfill its obligations hereunder, User shall have the right to terminate this Use Agreement by giving California Lions Camp written notice ninety (90) days prior to the Beginning Date as set forth at the beginning of this Agreement, or in supplemental agreements. In the event of such termination, User shall be entitled to the return of all of User's deposits. Upon such termination, User and Camp Whittier shall be released from any further obligations under the terms of this Use Agreement. In the event that User does not exercise its right to terminate as set forth herein, User's obligations under the Use Agreement shall continue in full force and effect.

2) **"Acts of God":** In the event that Camp Whittier is delayed or prevented from performance of its obligations under this Use Agreement by reason of Acts of God, fire or other destructions, strikes, lockouts, labor troubles, inability to procure materials, restrictive governmental laws or regulations, or any other cause without the fault and beyond the control of Camp Whittier, then Camp Whittier shall be excused from the performance under the terms of this Agreement. In such event, the User shall be entitled to the return of its deposits or User may reschedule its use of the Camp Whittier, with the approval of Camp Whittier, and all User's deposits shall be retained in accord with the Use Agreement.

Requests for any changes to the foregoing must be submitted for approval to Camp Whittier administrative office in writing at least 90 days prior to rental day.

 Authorized Signature Group Representative

 Date Signed

Lisa A. Franz, Director, Purchasing
 Print Name & Title

Oxnard School District/Chavez Elementary School
 Group/Organization Name

May 22, 2018 - May 25, 2018
 Event Date

OSD BOARD AGENDA ITEM

Name of Contributor: Robin I. Freeman

Date of Meeting: 3/21/18

- A. Preliminary _____
Study Session: _____
- B. Hearing: _____
- C. Consent Agenda X Agreement Category:
 X Academic
_____ Enrichment
_____ Special Education
_____ Support Services
_____ Personnel
_____ Legal
_____ Facilities
- D. Action Items _____
- E. Report/Discussion Items (no action) _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

Approval of Overnight Field Trip to CSU Channel Islands Santa Rosa Islands (Freeman/Caldwell)

The California State University of Channel Island proposes to organize, financially support, and lead 4 three day field trips for participating classes at RJ Frank Middle School. The dates are as follows April 16th-18th/April 18th-20th/April 22nd-25th/April 25th-27th.

Students will be traveling to the CSU Channel Islands Santa Rosa Island Research Station for an overnight field trip that is a critical component of the *Crossing the Channel* program collaboration between R.J Frank and California State University of Channel Islands. The Crossing the Channel program has been working with four Frank Oceanography classes (7th and 8th grades) since the beginning of the current school year. The ultimate goal of *Crossing the Channel* program is to cultivate a new community of Channel Islands stewards and transform the learning experiences of local students by building a professional network of local resources (i.e. federal agencies, local school districts, and universities) and experiential learning opportunities for our students.

FISCAL IMPACT: None

RECOMMENDATION: It is recommended that the Assistant Superintendent, Educational Services, the Principal of R.J. Frank Middle School that the Board of Trustees approve the overnight fieldtrip as outlined above.

ADDITIONAL MATERIAL:

Santa Rosa Island Proposal: Outlines the purpose/activities of the trip and the associated schedule.

Student Letter: The letter provides details about the trip, station facilities and schedule.

Dear RJ Frank Middle School Student,

I look forward to your upcoming trip to Santa Rosa Island from April (16th-18th/April 18th-20/April 22-25/April 25-27). Prior to coming to Santa Rosa Island you must complete and give your teacher a signed Santa Rosa Island Research Station (SRIRS) [liability waiver](#). Your group will meet at the RJ Frank Middle School campus on April (16th/18/22/25) and will return to the RJ Frank Middle School campus at approximately 6 pm on April (18th/20/25/27). Food will be provided and all trip expenses will be covered by the *Crossing the Channel* program. All you need to bring are your personal belongings and a sleeping bag/blanket. Please view our '[What to Bring and NOT Bring](#)' list for packing recommendations and emergency contact information. All your coolers and gear must satisfy the following requirements:

- a. Plastic bags and cardboard boxes are NOT permitted.
- b. All coolers and packages must be ≤45 lbs.
- c. Inspect all personal gear (e.g. packs, shoes) and clean off dirt, seeds and insects before departing.

The boat trip to Santa Rosa Island will take ~3 hours. If you are susceptible to sea sickness please take the necessary precautions (i.e. hydration, Dramamine, motion sickness bracelets, etc.). The SRI bunkhouse has sleeping accommodations for approximately ≤ 35 persons. The bunkhouse consists of eight bedrooms and three bathrooms. Each bedroom contains 2-6 beds. The kitchen is equipped with standard large and small appliances, cookware, dishes, silverware, cleaning supplies, etc. Drinking water and **hot and cold running water, showers, toilets**, and limited **laundry** facilities are available. Electricity is limited so please conserve power and water. Propane grills are also available for use. **Cell phone service is limited at the station**, but there are handheld radios, internet access, and a satellite phone available for emergency contact. We ask that you keep the research station clean during your stay and leave it in as good (or better) condition as you found it. Please review the [SRIRS policies and procedures](#) for additional information.

Prior to your visit please review the following SRIRS rules and regulations:

1. **Everything is protected.** Do not feed, collect, disturb, or harm park wildlife, plant life, or other natural or cultural resources.
2. **No fishing in marine reserves. Fishing is prohibited on the pier** due to its' proximity to the marine reserve.
3. **No jumping off the pier.**
4. **No pets.**
5. **No campfires, charcoal fires, or beach fires.**
6. **Conserve Energy and Water.**
7. **Remove all Personal Items.** No item(s) brought to the SRIRS or Channel Islands National Park are allowed to be left including (but not limited to) food, unless prior arrangements have been made with the station manager.

The Santa Rosa Island Research Station Manager in addition to 4-6 chaperones will accompany you on the boat and at the station during the duration of your stay. There will be a minimum of a 5:1 student to adult ratio.

Frank Middle School – Santa Rosa Island Agenda		
Day 1	6:00 am 8:30 am 12:00 pm 1:00 pm 2:00 pm 6:00 pm 8:00 pm 10:00pm	Depart campus to Ventura Harbor Travel to Santa Rosa Island via Island Packers Lunch at the Santa Rosa Island Research Station Research Station Orientation Natural and Cultural Resource Tour Dinner Evening Lecture/Activity Lights Out
Day 2	7:00 am 8:30 am 12:00 pm 1:00 pm 2:00 pm 6:00 pm 8:00 pm 10:00pm	Breakfast NPS Inventory and Monitoring Protocols (Sandy Beach & Vegetation) Lunch Tour CI Marine Sanctuary aboard NOAA Shearwater research vessel Journal Reflection Dinner Evening Lecture/Activity Lights Out
Day 3	7:00 am 8:00 am 10:00 am 1:00 pm 4:30 pm 6:00pm	Breakfast Orienteering Scavenger Hunt Clean-Up Travel to Santa Barbara Harbor via the NOAA Shearwater Depart Santa Barbara Harbor to campus Arrive at campus



Channel Islands
CALIFORNIA STATE UNIVERSITY

Sincerely,

Robyn Shea
Santa Rosa Island Research Station Manager
Ph. 805-402-7202
Email robyn.shea@csuci.edu

Santa Rosa Island Research Station

What to Bring and NOT to Bring



What to Bring

(Please note that SRIRS does not supply linens, sheets, towels, or pillows)

1. **Medications**, feminine hygiene products, allergy kits, etc.
2. Sleeping bag comfort rated to at least 40 degrees F (we provide a mattress)
3. Pillow and pillow case
4. Towel and toiletries
5. Jacket/Windbreaker
6. Layers of Clothing
7. Shoes (Some type of closed toed hiking/tennis shoe and socks)
8. Hat
9. Day pack
10. Water bottles (≥ 3 liters)
11. Sunscreen
12. Flashlight or headlamp (extra batteries)
13. Signed liability waiver

Other Items to Consider: When deciding what clothes to bring to SRIRS consider the climate (windy) and rustic conditions. Pack as minimally as possible, however be prepared for different weather conditions (bring layers). Other items you may want to bring include: swimwear, camera, binoculars, field guides, sun glasses, raingear (weather dependent), field notebook, pencils, alarm clock, and laundry detergent.

What not to Bring

1. **Plastic grocery bags** (single-use carryout bags) are prohibited on the island because if accidentally released they can pose health and environmental risks to threatened and endangered marine species.
2. **Firearms** or other **weapons** and **fireworks**.
3. **Non-Native Species.** Non-native, invasive species threaten endangered animals and plants on the Channel Islands and are costly to control. The following regulations and guidelines can help prevent the introduction and spread of non-native species before they become a problem. **To prevent the introduction of non-native species the following items shall not be transported or delivered to the island:** pets or any animal, service animals (except by permit from superintendent), live or potted plants, soil, cut flowers, firewood or any untreated, unfinished wood (including hiking sticks), **corrugated boxes**, tools or equipment with attached soil, motorized vehicles, and bicycles.

Please inspect your personal gear (e.g. packs, shoes) and clean off dirt, seeds and insects before departing from the mainland.

In Case of an Emergency

If there is an emergency, contact one of the individuals/agencies below and ask them to get hold of the Santa Rosa Island Research Station Manager, Robyn Shea , Radio call Sign – **951**.

Emergency Communication with Individual at the Santa Rosa Island Research Station
<ol style="list-style-type: none">1. Gina Matibag (CSUCI Academic Support Analyst): (805) 437-33202. Channel Islands National Park Dispatch: (805) 658-5720 (Regular business hours only)3. Sequoia Dispatch: (805) 658-5700 X 5620 (available 24/7)
For Questions Regarding Trip Logistics and Return Times
<ol style="list-style-type: none">1. Gina Matibag (CSUCI Academic Support Analyst): (805) 437-33202. Island Packers: (805) 642-1393

OSD BOARD AGENDA ITEM

Name of Contributor: **Dr. Vaca**

Date of Meeting: **March 21, 2018**

- A. Preliminary _____
Study Session _____
Report _____
- B. Hearing: _____
- C. Consent Agenda X
Agreement Category:
 - _____ Academic
 - _____ Enrichment
 - _____ Special Education
 - _____ Support Services
 - _____ Personnel
 - _____ Legal
 - _____ Facilities
- D. Action Items _____
- E. Approval of Minutes _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

Establish/Abolish/Increase/Reduce Hours of Position (Vaca)

Abolish

a two hour and forty five minute 183 day Paraeducator II position number 1325 to be abolished in the Special Education department. This position will be abolished due to the lack of work.

FISCAL IMPACT:

Savings for Paraeducator II-\$13,441 Special Education

RECOMMENDATION:

It is the recommendation of the Assistant Superintendent, Human Resources and Support Services, that the Board of Trustees approve the abolishment of the position, as presented.

ADDITIONAL MATERIAL:

None

OSD BOARD AGENDA ITEM

Name of Contributor: **Dr. Jesus Vaca**

Date of Meeting: **March 21, 2018**

- A. Preliminary _____
Study Session _____
Report _____
- B. Hearing: _____
- C. Consent Agenda X
Agreement Category:
 - _____ Academic
 - _____ Enrichment
 - _____ Special Education
 - _____ Support Services
 - _____ Personnel
 - _____ Legal
 - _____ Facilities
- D. Action Items _____
- E. Approval of Minutes _____
- F. Board Policies 1st Reading _____ 2nd Reading _____

Personnel Actions (Vaca)

The attached are recommended Personnel Actions presented to the Board of Trustees for consideration. The salary placement for the individuals employed will be in accordance with the salary regulations of the District. Personnel Actions include: new hires, transfers, pay changes, layoffs, recall from layoffs, resignations, retirements, authorizations, and leaves of absence.

FISCAL IMPACT:

N/A

RECOMMENDATION:

It is the recommendation of the Assistant Superintendent, Human Resources & Support Services that the Board of Trustees approve the Personnel Actions, as presented.

ADDITIONAL MATERIAL:

Classified Personnel Actions (two pages)
Certificated Personnel Actions (one page)

CLASSIFIED PERSONNEL ACTIONS

March 21, 2018

New Hire

Goldberg, Sandra	Paraeducator III, Position #8631 Special Education 5.75 hrs./183 days	03/06/2018
Morales-Hernandez, Lorena Y	Office Assistant II (B), Position #8687 San Miguel 6.0 hrs./203 days	02/21/2018

Exempt

Cortez, Vanessa	AVID Tutor	02/20/2018
Ramirez, Annmary	Campus Assistant	02/20/2018

Limited Term

Calderon, Natalie C	Paraeducator	02/26/2018
Canales, Catalina	Health Care Technician	03/05/2018
Contreras, Tino A	Paraeducator	02/23/2018
Cruz, Carolina R	Paraeducator	02/15/2018
Limon-Garcia, Betsy	Paraeducator	02/26/2018
Lopez, Roxanne V	Paraeducator	02/27/2018
Martinez, Leticia F	Paraeducator	03/05/2018
Mendez, Yessica	Paraeducator	02/21/2018
Ortega, Michelle A	Paraeducator/Preschool Teacher	03/01/2018
Sedeno, Brianna A	Paraeducator	02/21/2018
Villafana, Carina N	Paraeducator	02/23/2018

Transfer

Gurrola, Mishael	Site Technology Technician, Position #2836 Frank 8.0 hrs./246 days Site Technology Technician, Position #2946 Frank 5.0 hrs./246 days	02/09/2018
Gutierrez, Martha P	Secretary (B), Position #8695 Transportation 8.0 hrs./246 days Secretary (B), Position #922 Enrollment Center 8.0 hrs./246 days	03/12/2018
Ibarra Diaz, Pamela G	Family Liaison (B), Position #2429 Marina West 6.0 hrs./180 days Family Liaison (B), Position #8180 San Miguel 8.0 hrs./180 days	02/26/2018
Marin, Edith Ayerin E	Administrative Assistant (B), Position #1852 Ed. Services 8.0 hrs./246 days School Office Manager, Position #1824 Ramona 8.0 hrs./210 days	03/12/2018

Unpaid Leave of Absence

Rodriguez, Alma R	Paraeducator III, Position #1953 Special Education 5.75 hrs./183 days	03/06/2018-04/18/2018
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Resignation

Ferrer Munson, Rafael	District Translator (B), Position #7259 Special Education 8.0 hrs./246 days	03/23/2018
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Retirement

Elliott, Karen

Child Nutrition Worker, Position #389

12/03/1998-01/31/2018

Brekke 4.5 hrs./185 days

Wong, Ling

Child Nutrition Worker, Position #2427

07/26/2004-04/24/2018

Kamala 5.5 hrs./185 days

CERTIFICATED PERSONNEL ACTIONS

Listed below are recommended Certificated Personnel Actions presented to the Board of Trustees for consideration. The salaries for the individuals employed will be determined, in accordance with the salary regulations of the District.

New Hires

Chavarin, Rigoberto	Substitute Teacher	2017/2018 School Year
Fernandez, Alejandro	Substitute Teacher	2017/2018 School Year
Gonzalez, Claudia	Substitute Teacher	2017/2018 School Year
Nourok, Andrew	Substitute Teacher	2017/2018 School Year
San Jose, Gisell	Substitute Teacher	2017/2018 School Year
Zendejas, Daniel	Substitute Teacher	2017/2018 School Year

RESIGNATION

Carpenter, Jessica	Soria	June 14, 2018
Johnson, Samantha	Lemonwood	June 4, 2018

RETIREMENT

Breitenbach, Marlene	Marshall	June 30, 2018
Freeman, Robin	Ed Services	June 29, 2018

BOARD AGENDA ITEM

Name of Contributor: Janet Penanhoat

Date of Meeting: March 21, 2018

- STUDY SESSION _____
- CLOSED SESSION _____
- SECTION A-1: PRELIMINARY _____
- SECTION A-II: REPORTS _____
- SECTION B: HEARINGS _____
- SECTION C: CONSENT AGENDA _____

Agreement Category:

- _____ Academic
- _____ Enrichment
- _____ Special Education
- _____ Support Services
- _____ Personnel
- _____ Legal
- _____ Facilities

SECTION D: ACTION _____ X

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

Approve Resolution #17-30 Making a Determination and Adopting the Final Environmental Impact Report for the Doris/Patterson Project (Penanhoat/Fateh/CFW)

The purpose of this Agenda Item is to consider a resolution making a determination and adopting the Final Environmental Impact Report (EIR) for the Doris Avenue/Patterson Road Educational Facilities Project (proposed project). The District proposes to construct and operate joint-use facilities to support a district administrative office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8.

The District retained Tetra Tech to prepare the EIR. The EIR evaluates potential impacts from all phases of project planning, implementation, and operation for the proposed project. As lead Agency for the California Environmental Quality Act (CEQA), the District prepared the EIR with assistance from Tetra Tech in compliance with the *State CEQA Guidelines* and City of Oxnard CEQA Guidelines.

The EIR serves as a public disclosure document explaining the effects of the proposed project on the environment, alternatives to the project, and ways to minimize adverse effects and to increase beneficial effects. On December 4, 2017, the District opened a 45-day public review and comment period on the Draft EIR. The public comment period on the Draft EIR closed on January 17, 2018. Comments have been incorporated into the Final EIR. A public hearing was held in the Hearings section of this meeting to receive comments on the Final EIR.

FISCAL IMPACT

None.

RECOMMENDATION

It is the recommendation of the Assistant Superintendent, Business & Fiscal Services, and the Director of Facilities, in conjunction with Caldwell Flores Winters, that the Board of Trustees approve Resolution #17-30 making a determination and Adopting the Final Environmental Impact Report for the Doris/Patterson Project.

ADDITIONAL MATERIAL

- Attached: Resolution #17-30 (2,826 pages) inclusive of:
- Exhibit A: Final Environmental Impact Report for the Doris Avenue/Patterson Road Educational Facilities Project – prepared by Tetra Tech Vol. I & II (2,796 pages)
 - Exhibit B: Impact Analysis (6 pages)
 - Exhibit C: Statement of Overriding Considerations (2 pages)
 - Exhibit D: Mitigation Monitoring and Reporting Program (18 pages)

RESOLUTION #17-30
RESOLUTION OF THE BOARD OF TRUSTEES OF THE OXNARD SCHOOL DISTRICT
CERTIFYING THE ENVIRONMENTAL IMPACT REPORT UNDER CEQA FOR THE
DORIS/PATTERSON PROJECT, ADOPTING ENVIRONMENTAL FINDINGS,
ADOPTING THE STATEMENT OF OVERRIDING CONSIDERATIONS, APPROVING
THE MITIGATION MONITORING AND REPORTING PROGRAM, AND APPROVING
THE PROJECT

WHEREAS, on January 17, 2018, the Board of Trustees for the Oxnard School District (“Board”) approved that Agreement for Purchase and Sale of Real Property and Joint Escrow Instructions, Water Service Agreement, and Mitigation Agreement with respect to the acquisition of 25 acres of land for the proposed development of the Doris/Patterson project (the “Project”).

WHEREAS, the Project will be a new District administrative office, a 700 student elementary school (grades K-5), and a 1200 student middle school (grades 6-8), will comprise approximately 178,678 square feet and provide 220 parking spaces onsite, and will include soccer fields, tennis courts, hard courts and play fields.

WHEREAS, the Project is located in unincorporated Ventura County, California, and within the City of Oxnard’s Sphere of Influence, at the southeast corner of Doris Avenue and North Patterson Road.

WHEREAS, the California Environmental Quality Act (“CEQA”) together with guidelines require that certain projects be reviewed for environmental impacts and that environmental documents be prepared.

WHEREAS, the District, assisted by consultant TetraTech, Inc., initiated the environmental review process required by CEQA to analyze the potential environmental impacts of the Project.

WHEREAS, an Initial Study (“IS”) was prepared for the Project and released for public review and comment on May 11, 2017.

WHEREAS, on May 11, 2017 a formal Notice of Preparation of an Environmental Impact Report (“NOP”) was issued soliciting public input regarding the scope and content of the Draft Environmental Impact Report for the Project (“Draft EIR”). The comment period was from May 11, 2017 through June 9, 2017.

WHEREAS, on May 22, 2017 the District held a public scoping session, in conjunction with the circulation of the NOP, to elicit additional comments from the public on the scope and content of the Draft EIR.

WHEREAS, during the NOP period and scoping session (May 11, 2017 through June 9, 2017), the District received comments. These comments were considered in the preparation of the Draft EIR.

WHEREAS, the District, as lead agency, caused to be prepared a Draft EIR for the Project.

WHEREAS, in accordance with CEQA, the Draft EIR was made available for public review from December 4, 2017 through January 17, 2018.

WHEREAS, between the start of the public comment period on December 4, 2017 through January 17, 2018, the District received written comments on the Draft EIR.

WHEREAS, in accordance with CEQA, all comments received on the Draft EIR during the comment period were responded to and included in the Final Environmental Impact Report (“EIR”). The EIR, attached hereto as Exhibit A, includes the Draft EIR, comments and responses to comments on the Draft EIR, and text changes to the Draft EIR and EIR.

WHEREAS, in accordance with CEQA, a public notice was posted at the District’s administrative office and posted on the District’s website regarding the availability of the EIR and the Public Hearing scheduled for March 21, 2018.

WHEREAS, on March 10, 2018, responses to comments were mailed to all commenting State and local agencies at least ten days prior to the Board’s proposed action on the EIR for the Project.

WHEREAS, on March 21, 2018, the Board held a duly noticed public hearing on, among other items, adoption of this Resolution certifying the EIR. After receiving verbal and written testimony, the Board closed the public hearing.

WHEREAS, the EIR, including comments and responses, reflects the District’s independent judgment and analysis on the potential for environmental impacts from the Project.

WHEREAS, the EIR identified several potentially significant impacts that will be reduced to a less than significant level with specified mitigation measures; therefore, approval of the Project will require adoption of findings on impacts and mitigations as set forth in Exhibit B, attached hereto.

WHEREAS, the EIR identified significant and unavoidable environmental impacts of the Project; therefore, approval of the Project will require adoption of findings concerning mitigations as also set forth in Exhibit B attached hereto, findings concerning alternatives as set forth in Exhibit B attached hereto, and a Statement of Overriding Considerations as set forth in Exhibit C attached hereto.

WHEREAS, a Mitigation Monitoring and Reporting Program, as required by CEQA, is attached hereto as Exhibit D.

WHEREAS, the EIR and all the documents relating to the Project are available for review in the District’s Administrative Office during normal business hours. The location and custodian of the EIR and other documents that constitute the record of proceedings for the Project is the Oxnard School District Administrative Office, 1051 South A Street, Oxnard, California 93030.

NOW, THEREFORE, BE IT RESOLVED THAT, the Board of Trustees certified the following:

1. The foregoing recitals are true and correct and made a part of this Resolution.
2. The EIR attached hereto as Exhibit A, has been completed in compliance with CEQA and the CEQA Guidelines.
3. The District Board of Trustees has independently reviewed and considered the information contained in the EIR, including the written comments received during the Draft EIR review period and the oral and written comments received at the public hearing, prior to acting on the Project.
4. The EIR reflects the District's independent judgment and analysis on the potential environmental impacts of the Project. The EIR provides information to the decision makers and the public on the environmental consequences of the Project.
5. The EIR adequately describes the Project, its significant environmental impacts, mitigation measures, and a reasonable range of alternatives to the Project.

BE IT FURTHER RESOLVED THAT the Board of Trustees of the Oxnard School District hereby:

1. Certifies that the EIR was prepared and completed in compliance with CEQA;
2. Adopts the impacts and mitigations findings set forth in Exhibit B;
3. Adopts the findings concerning feasibility of alternatives and additional mitigation measures set forth in Exhibit B;
4. Adopts the Statement of Overriding Considerations set forth in Exhibit C;
5. Approves the Mitigation Monitoring and Reporting Program set forth in Exhibit D;
6. Finds and incorporates herein by reference that Exhibits A, B, C, and D are all in compliance with the requirements of CEQA;
7. Authorizes the President of the Board to execute this Resolution and a Notice of Determination ("NOD"), and the Secretary to attest and certify to the passage and adoption thereof and those officers and the District's Superintendent and the Superintendent's designees to execute all documents and perform all actions necessary to carry out the intent of this Resolution;
8. Directs the Superintendent, or his designee, to file with the County Clerk-Recorder of the County of Ventura and the State Clearinghouse the NOD pursuant to the California Code of Regulations Section 15094; and

9. Finds that all actions required to be taken by applicable law related to the approval of the Project have been taken and hereby approves the Project as identified and evaluated in the EIR.

APPROVED, PASSED AND ADOPTED by the Board of Trustees of the Oxnard School District on this 21st day of March 2018, by the following vote:

Ayes: _____
Nays: _____
Abstentions: _____
Absences: _____

Board of Trustees:

President Cordes: _____
Clerk Morrison: _____
Trustee O’Leary: _____
Trustee Robles-Solis: _____
Trustee Madrigal Lopez: _____

Debra M. Cordes
President of the Board of Trustees
Oxnard School District

I HEREBY CERTIFY that the foregoing resolution was duly and regularly introduced, passed and adopted by the members of the Board of Trustees of the Oxnard School District at a public meeting of said Board held on March 21, 2018.

Ernie “Mo” Morrison
Clerk of the Board of Trustees
Oxnard School District

EXHIBIT "A"
Resolution #17-30
(1 of 2)

Job No. 34007.05

Final Environmental Impact Report
Doris Avenue/Patterson Road
Educational Facilities Project
Ventura County, California
SCH# 2017051041

Volume I

Prepared for:

Mr. David Fateh
Director of Facilities
Oxnard School District
1051 South A Street
Oxnard, California 93030

Prepared by:

Tetra Tech, Inc.
5383 Hollister Avenue, Suite 130
Santa Barbara, California 93111

March 12, 2018

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APPENDICES

APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM

ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
%	Percent
BMP	Best Management Practice
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CLUP	Comprehensive Land Use Plan
EIR	Environmental Impact Report
LUC	Land Use Covenant
OSD	Oxnard School District
SQDV	stormwater quality design volume
TIAR	Traffic Impact Analysis Report

1.0 INTRODUCTION

The Doris Avenue/Patterson Avenue Educational Facilities Project Final Environmental Impact Report (SCH No. 2017051041) (hereafter “Final EIR” or “FEIR”) has been prepared pursuant to the California Environmental Quality Act (CEQA) to address the potential environmental effects of the Doris Avenue/Patterson Avenue Educational Facilities Project and associated actions (hereafter “Proposed Project”) and considered by the Oxnard School District (hereinafter “district”) in connection with its public consideration of requested approvals for the Proposed Project.

This Final Environmental Impact Report (Final EIR) has been prepared to describe the disposition of environmental issues raised in the comments received on the proposed project’s Draft EIR (Final EIR Vol.II). Evaluating the potential impacts of the proposed project on the environment and responding to comments is an essential part of the environmental review process required under the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC) § 21000 et seq.). This Final EIR has been completed in accordance with CEQA and the CEQA Guidelines (Title 14 of Section 15132 of the California Code of Regulations (CCR) (14CCR § 15132)).

1.1 FINAL EIR REQUIREMENTS

Table 1-1 identifies the required content of a Final EIR per Section 15132 of the CEQA Guidelines and where it can be located within this document.

Table 1-1 Final EIR Content

Required Final EIR Content Per Section 15132 of the CEQA Guidelines	Where it is located in this EIR
The Draft EIR or a revision of the draft.	Final EIR Volume II, Draft EIR
Comments and recommendations received on the Draft EIR either verbatim or in Summary.	Final EIR Volume I, Section 2.0, Comments and Response to Comments
A list of persons, organizations, and public agencies commenting on the Draft EIR.	Final EIR Volume I, Section 2.0, Comments and Response to Comments
The responses of the Lead Agency to significant environmental points raised in the review and consultation process.	Final EIR Volume I, Section 2.0, Comments and Response to Comments
Any other information added by the Lead Agency.	Final EIR Volume I, Section 3.0 Draft EIR Errata

Volume I of the Final EIR for the proposed project has been prepared to provide responses to comments received on the Draft EIR and is to be used in conjunction with, rather than in place of, the Draft EIR. The complete Draft EIR is included as Volume II of the Final EIR. Therefore, the information in this Final EIR, which incorporates the Draft EIR in Volume II, fulfills state CEQA requirements for a complete EIR.

The Final EIR provides revisions for clarification or amplification of information already in the record. In no instances do the errata (Final EIR Volume 1, Section 3.0) provide substantial new information or indicate a new impact or increase in the severity of an impact identified in the Draft EIR.

In compliance with CEQA Guidelines Section 15090, prior to approving a project the lead agency shall certify that:

- The Final EIR has been completed in compliance with CEQA.
- The Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project; and
- The Final EIR reflects the lead agency’s independent judgement and analysis.

2.0 COMMENTS AND RESPONSE TO COMMENTS

This section includes written comments received on the Draft EIR, verbal comments received at the public meeting, and OSD's response to each comment received during the public review period.

2.1 INTRODUCTION

The Draft EIR was circulated to numerous agencies having jurisdiction over resources that could be affected by the proposed project or having expertise or interest in environmental resources. In addition, interested organizations and individuals received the documents or were notified of their availability.

Comment letters and specific comments are given letters and numbers for reference purposes. Where sections of the Draft EIR are excerpted in this document, the sections are shown indented. Table 2-1, below, provides a list of agencies and persons that submitted comments on the Draft EIR during the public review period from December 4, 2017 and ending on January 17, 2018 including oral comments that were received during the December 6, 2017 public meeting.

In accordance with CEQA Guidelines Section 15088, OSD evaluated comments on environmental issues received from persons who reviewed the Draft EIR and prepared a written response to all comments received during the noticed comment period.

Additional comments received from January 25, 2018 through February 23, 2018 that were received after the close of the noticed comment period are included but were not responded to by OSD.

Table 2-1 Comments Received on the Draft EIR

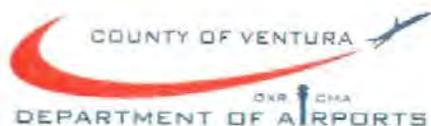
Comment Code	Signatory	Date
	Agencies	
A1	County of Ventura Department of Airports	01/12/18
A2	Ventura County Transportation Commission	01/12/18
A3	Ventura County Watershed Protection District	01/15/18
A4	Ventura LAFCo	01/17/18
A5	County of Ventura Resource Management Agency, Planning Division	01/17/18
A6	County of Ventura Resource Management Agency, Planning Division	01/17/18
A7	Ventura County Air Pollution Control District	01/17/18
A8	City of Oxnard Development Services	01/17/18
A9	State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit	01/18/18
A10	County of Ventura Public Works Agency, Transportation Department, Traffic, Advance Planning & Permits Division	01/23/18
A11	California Department of Education	02/21/18
A12	Ventura Local Agency Formation Commission	02/23/18
	Speaker	
S1	Ms. Romero	12/06/17

Comment Code	Signatory	Date
	Public	
P1	Carol Dreager	12/12/17
P2	Paul Giacobbe	12/19/17
P3	Carol Dreager	01/11/18
P4	Jan Baskin-Smith	01/16/18
P5	Margaret Skupien	01/16/18
P6	Charles A. Wilson	01/16/18
P7	Steve Zacks	01/16/18
P8	Kim Hayashi	01/16/18
P10	Jan Baskin-Smith	01/15/18
P11	Mike and Karen Turek	01/16/18
P12	Ellen Bougher Harvey	01/16/18
P13	Thaddeus Skupien	01/17/18
P14	Marlene Herman	01/17/18
P15	David B. Littell	01/18/18
P16	Diana James	01/17/18
P17	Paul Giacobbe	02/05/18

2.2 FORMAT OF RESPONSES TO COMMENTS

Responses to each of the comment letters are provided on the following pages. Each comment letter is provided an index number shown in the upper right corner of each letter. Individual comments/points within each letter are numbered in the right-hand margin of each letter. The OSD's responses to each comment letter immediately follow each letter and are referenced by the comment numbers in the margins of the comment letter.

2.3 RESPONSES TO COMMENTS



RCV'D ON 1/16/18 OF
A1

555 AIRPORT WAY, SUITE B
 CAMARILLO, CA 93010
 PHONE: (805) 388-4274
 FAX: (805) 388-4366
WWW.VENTURAUSAIRPORTS.COM
WWW.FLYONNARD.COM

January 12, 2018

Mr. David Fateh, Director of Facilities
 Oxnard School District
 1051 South A Street
 Oxnard, CA 93030

RE: Comments on Draft Environmental Impact Report (DEIR) Doris Avenue/Patterson Road Educational Facilities Project

Dear Mr. Fateh,

The Department of Airports is aware of the comments submitted by the Ventura County Transportation Commission staff on January 8, 2018 (attached) and is in agreement with those comments. The Department of Airports offers the following additional comments:

A1-1

3.8 Hazards and Hazardous Materials, pages 3-76 through 3-78

The DEIR does not address the potential severity of an accident occurring at a school site where as many as 1,900 students and staff are present.

Aircraft approaching from the north and northwest routinely fly over the proposed site, and there are established helicopter routes that will result in overflight of the site. The control tower, in order to maintain the efficiency of the airspace, will on occasion have training aircraft conduct a "north pattern" which results in additional overflight of the site.

A1-2

As noted in the DEIR, the site lies within the Traffic Pattern Zone (TPZ) as identified in the Ventura County Airport Comprehensive Land Use Plan (CLUP). The intent of the TPZ is to provide areas on the ground near the airport for a distressed aircraft to make an emergency landing, and to protect people and property on the ground when such an event occurs.

Mr. David Fateh
 DEIR Doris and Patterson
 January 12, 2018
 Page 2

Appendix I which is referenced in this section states the potential for an accident occurring at the site is once every 462 years. Yet historical crash data on and around the airport shows the probability being much higher with an average of once every 4.2 years.

A1-2
 cont.

3.11 Noise, page 3-109

The site is located outside of the 60 CNEL contour and is considered compatible pursuant to noise compatibility standards. However, the DEIR does not address single-event noise that would potentially be a significant impact to noise levels for academic activities, both inside the classrooms and outside on the school grounds.

A1-3

5.0 Alternatives

The DEIR addresses a No Project Alternative and a Reduced Use Project Alternative. The DEIR needs to include alternate locations as an alternative. A location outside the TPZ has been stated as a preferred alternative by several agencies, yet the DEIR is silent on this as a possible alternative.

A1-4

Thank you again for the opportunity to comment and I can be reached at 805-388-4200, should you have any questions

Sincerely,

TODD L MCNAMEE, AAE
 Director of Airports

CC: Ventura County Airport Land Use Commission
 AAC/OAA Packets

Enclosures



January 8, 2018

Mr. David Fateh, Director of Facilities
 Oxnard School District
 1051 South A Street
 Oxnard, California 93030

Subject: Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project

Dear Mr. Fateh,

The Ventura County Transportation Commission (VCTC) is the Airport Land Use Commission (ALUC) for Ventura County and appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project.

The DEIR recognizes the role of the ALUC and the Ventura County Airport Comprehensive Land Use Plan (CLUP) and identifies the proposed project as lying within the Traffic Pattern Zone (TPZ) for Oxnard Airport. The DEIR also recognizes that the school included in the proposed project is inconsistent with the criteria found on Table 6B, Adopted Land Use Compatibility in Safety Zones for Civilian Airport, of the CLUP and ultimately acknowledges the Significant Unavoidable Impact that arises because of the conflict between the proposed project and the CLUP. However, the ALUC concludes that the DEIR's analysis does not adequately inform the public of the full range of issues associated with hazards posed by aircraft and attempts to minimize the importance of the local control as exercised through the CLUP. Please see the ALUC's specific comments referenced to page numbers below:

Pages 3-76 – 3-78 Hazards and Hazardous Material

The DEIR discusses the various planning criteria concerning aircraft hazards at the federal, state and local levels and correctly states that the federal and state agencies, whose regulations are less stringent, defer local land use decisions to local agencies. What the DEIR does not include, but should recognize in this discussion, is that the adopted CLUP was developed in partnership with local agencies and in consideration of local priorities giving special deference to "Vulnerable Occupants" of land uses surrounding Ventura County's airports. Vulnerable Occupants are defined in the California Airport Land Use Planning Handbook as those segments of the population whom are often afforded special consideration and protection because they may not know how to respond to an emergency or may not be physically able to do so, specifically seniors, the disabled, and children. The Handbook supports the

A1-5

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DEIR Doris/Avenue Patterson Road Educational Facilities Project

Page 2

CLUP designation of schools being unacceptable within the TPZ and states that outright prohibition of new or expanded facilities that have Vulnerable Occupants may be the appropriate policy.

Pages 3-77 Hazards and Hazardous Material

The DEIR cites the Aircraft Hazard and Land Use Risk Assessment prepared by Heliplanners for this project and places the probability of an accident at this specific location at once in 462 years and further downplays the risk posed by overflight by stating an aircraft accident may occur at any time and at any place and that the proposed project could be struck by an aircraft enroute between any two airports with no connection to Oxnard Airport.

While technically correct, the DEIR should include the discussion found on page 11 of the Aircraft Hazard and Land Use Risk Assessment finding that the likelihood of an accident at Oxnard Airport is once every 4.2 years, and that as shown in Exhibits F-1 and F-2, the area within the TPZ is subject to a greater number of aircraft accidents than outside of the TPZ. The DEIR should clearly explain that the TPZ has been designated as a safety zone because it is the area above and around an airport where aircraft are descending, ascending and circling in preparation of landing and after takeoff. It is because of this activity that the TPZ is subject to more accidents than the areas outside of it.

The DEIR does not consider the severity of a potential accident or the fact that the Oxnard School District has already placed another school within the Traffic Pattern Zone for Oxnard Airport. The DEIR simply adopts a worst case scenario and suggests that an event could result in 10 severe injuries or greater. The DEIR should provide statistics as to the number of children at risk and the types and severities of potential injuries so that parents and policy makers are fully informed. The DEIR should also include a discussion of Juan Lagunas Soria School with a student population of over 1000 already in the TPZ for Oxnard Airport. The placement of a second school site within the TPZ increases the odds of a severe event and should be included in the discussions concerning hazards as well as Cumulative Impacts.

Additionally, the ALUC agrees with the Ventura County Department of Airports comments siting overflight of helicopters as a concern. The Heliplanner's Risk Assessment on page 5, estimates that less than 25% of Oxnard's Airports helicopter traffic may fly near the project site but the DEIR does not address impacts such as noise, created by the low flying rotary wing aircraft. While the project is well outside of the 60 CNEL contour, single-event noise levels should be considered especially during outdoor activities.

**A1-5
cont.**

DEIR Doris/Avenue Patterson Road Educational Facilities Project
Page 3

Pages 3-98 – 3-99 Land Use Planning

Similar to comments made above, the DEIR discusses the various planning criteria concerning aircraft hazards at the federal, state and local levels and correctly states that the federal and state agencies, whose regulations are less stringent, defer local land use decisions to local agencies. The DEIR goes on to infer internal inconsistencies in the CLUP and quotes the Alternative Compatibility Policies discussed in the CLUP and used for reference as the CLUP was being developed and adopted. Those alternative policies discourage but don't prohibit development with activities that generates more than 150 people per acre in the TPZ.

The DEIR does not include that the California Airport Land Use Planning Handbook provides further guidance when it comes to Vulnerable Occupants and provides that special consideration be afforded when risk acceptability cannot be measured simply in terms of the numbers of occupants. Again, this consideration was developed in partnership with local agencies and in consideration of local priorities giving special deference to "Vulnerable Occupants" of land uses surrounding Ventura County's airports.

A1-5 cont.

Page 3-99 Land Use Planning

The DEIR incorrectly cites Table 6B of the CLUP as Land Use Compatibility Standards Related to Aircraft Noise. Instead please reference table 6A of the CLUP on page 6-2.

Page 5-4 Alternatives to the Proposed Project

The DEIR considered two alternatives, the No Build Alternative and the Reduced Project Use Alternative and rejected a third alternative to intensify uses at existing schools. It is understandable that none of these alternatives met the project goal, that said, the project alternatives discussion should have included a discussion of building the proposed project at a different location. The DEIR does not make a case as to why this specific location provides better opportunities to meet the project goals than a location that lies outside of Oxnard Airport's Traffic Pattern Zone.

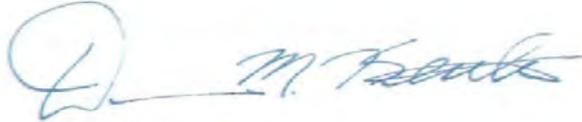
Lastly, it is important to note that the Oxnard School District may override any finding of the ALUC but it needs to follow the guidance of Section 5.5 of the California Airport Land Use Planning Handbook with special attention paid to section 5.2 Findings. A local agency cannot simply overrule an ALUC determination without first documenting the basis for the overruling action and relating that basis directly to the purposes for which the ALUC statues were adopted. Special attention should be given to the section of the Handbook which provides guidance on Vulnerable Occupants.

DEIR Doris/Avenue Patterson Road Educational Facilities Project
Page 4

Again thank you for this opportunity to provide comments on the Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project. If you have questions concerning the Ventura County Airport Land Use commission's comments please contact Mr. Steve DeGeorge, Planning Director at (805) 642-1591 Ext. 103.

**A1-5
cont.**

Sincerely,

A handwritten signature in blue ink, appearing to read "Darren Kettle". The signature is fluid and cursive, with a large initial "D" and "K".

Darren Kettle
Executive Director

Letter A1	Todd L. McNamee, AAE County of Ventura Department of Airports
------------------	--

Response to Comment A1-1:

Comment notes agreement with comments submitted by Ventura County Transportation Commission. Comment noted. See response to Ventura County Transportation Commission comment letter (Comment Letter A2).

Response to Comment A1-2:

Comment states that the Draft EIR does not address the potential severity of the accident at the proposed school site and that the probability for a crash would be an average of once every 4.2 years. The Draft EIR addressed potential airport hazards in Section 3.8. The estimated occurrence every 462 years discussed in the Draft EIR refers to the accident risk at the project site as opposed to within the Oxnard Airport Sphere of Influence (SOI). The AHLRA includes calculations for both areas on pages 10 - 12 of the report (Appendix I of the Draft EIR). The calculations show an accident is likely to happen within the airport SOI on an average of once every 4.2 years. However, the project site comprises a small amount of the overall area included within the SOI. All potential accidents would not be expected to occur in one place within the SOI.

Response to Comment A1-3:

Comment states that the Draft EIR does not address single-event noise that would potentially be a significant impact to both inside and outside the school grounds. The standard metric for airport noise is CNEL (Community Noise Equivalent Level), which is a single noise level averaged for a 24 hour period. This metric would take into account the single event noise the commenter describes. While the noise levels may rise higher during an event closer to the site, the standard is based on the average of all the events during a single day. As noted in the comment and in the Draft EIR, the project site lies outside the 60 dB noise contour around Oxnard Airport, and would therefore be exempt from the noise compatibility standards given in the CLUP. In addition, the project will be designed to meet both the City of Oxnard's and State of California interior noise level standard of 45 dBA CNEL. Noise levels from single event aircrafts may exceed the 60 dBA Leq at times throughout the day, but the project will achieve a 45 dBA CNEL for all interior classrooms.

Response to Comment A1-4:

Comment states that the Draft EIR should have addressed an alternative location alternative. As discussed in Section 5.0 of the Draft EIR, "An EIR must describe a range of reasonable and of potentially feasible alternatives to the project, or to the location of the project, which would feasibly attain most of the basic Project Objectives but would avoid or substantially lessen any significant effects. The comparative merits of the alternatives must be evaluated. An EIR need not consider every conceivable alternative, but it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The range of alternatives is governed by a "rule of reason" that requires discussion of only those alternatives necessary for the Oxnard School District (Lead Agency) to make a reasoned choice."

As discussed in the Draft EIR, Section 2. 1: "The District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. A copy of the Potential New School Sites Study is provided in Appendix B." As described in the study, the alternative locations were rejected for various factors that made siting a school at these locations

infeasible. An EIR is not required to consider alternatives that are infeasible, therefore, an alternative site location was not analyzed.

Response to Comment A1-5:

Commenter has attached comments submitted by Ventura County Transportation Commission. See response to Ventura County Transportation Commission comment letter (Comment Letter 15).



Ventura County Transportation Commission

A2

January 8, 2018

Mr. David Fateh, Director of Facilities
 Oxnard School District
 1051 South A Street
 Oxnard, California 93030

Subject: Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project

Dear Mr. Fateh,

The Ventura County Transportation Commission (VCTC) is the Airport Land Use Commission (ALUC) for Ventura County and appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project.

The DEIR recognizes the role of the ALUC and the Ventura County Airport Comprehensive Land Use Plan (CLUP) and identifies the proposed project as lying within the Traffic Pattern Zone (TPZ) for Oxnard Airport. The DEIR also recognizes that the school included in the proposed project is inconsistent with the criteria found on Table 6B, Adopted Land Use Compatibility in Safety Zones for Civilian Airport, of the CLUP and ultimately acknowledges the Significant Unavoidable Impact that arises because of the conflict between the proposed project and the CLUP. However, the ALUC concludes that the DEIR's analysis does not adequately inform the public of the full range of issues associated with hazards posed by aircraft and attempts to minimize the importance of the local control as exercised through the CLUP. Please see the ALUC's specific comments referenced to page numbers below:

A2-1

Pages 3-76 – 3-78 Hazards and Hazardous Material

The DEIR discusses the various planning criteria concerning aircraft hazards at the federal, state and local levels and correctly states that the federal and state agencies, whose regulations are less stringent, defer local land use decisions to local agencies. What the DEIR does not include, but should recognize in this discussion, is that the adopted CLUP was developed in partnership with local agencies and in consideration of local priorities giving special deference to "Vulnerable Occupants" of land uses surrounding Ventura County's airports. Vulnerable Occupants are defined in the California Airport Land Use Planning Handbook as those segments of the population whom are often afforded special consideration and protection because they may not know how to respond to an emergency or may not be physically able to do so, specifically seniors, the disabled, and children. The Handbook supports the

A2-2

JAN 17 10 00 AM 2018

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DEIR Doris/Avenue Patterson Road Educational Facilities Project

Page 2

CLUP designation of schools being unacceptable within the TPZ and states that outright prohibition of new or expanded facilities that have Vulnerable Occupants may be the appropriate policy.

**A2-2
cont.**

Pages 3-77 Hazards and Hazardous Material

The DEIR cites the Aircraft Hazard and Land Use Risk Assessment prepared by Heliplanners for this project and places the probability of an accident at this specific location at once in 462 years and further downplays the risk posed by overflight by stating an aircraft accident may occur at any time and at any place and that the proposed project could be struck by an aircraft enroute between any two airports with no connection to Oxnard Airport.

While technically correct, the DEIR should include the discussion found on page 11 of the Aircraft Hazard and Land Use Risk Assessment finding that the likelihood of an accident at Oxnard Airport is once every 4.2 years, and that as shown in Exhibits F-1 and F-2, the area within the TPZ is subject to a greater number of aircraft accidents than outside of the TPZ. The DEIR should clearly explain that the TPZ has been designated as a safety zone because it is the area above and around an airport where aircraft are descending, ascending and circling in preparation of landing and after takeoff. It is because of this activity that the TPZ is subject to more accidents than the areas outside of it.

A2-3

The DEIR does not consider the severity of a potential accident or the fact that the Oxnard School District has already placed another school within the Traffic Pattern Zone for Oxnard Airport. The DEIR simply adopts a worst case scenario and suggests that an event could result in 10 severe injuries or greater. The DEIR should provide statistics as to the number of children at risk and the types and severities of potential injuries so that parents and policy makers are fully informed. The DEIR should also include a discussion of Juan Lagunas Soria School with a student population of over 1000 already in the TPZ for Oxnard Airport. The placement of a second school site within the TPZ increases the odds of a severe event and should be included in the discussions concerning hazards as well as Cumulative Impacts.

Additionally, the ALUC agrees with the Ventura County Department of Airports comments siting overflight of helicopters as a concern. The Heliplanner's Risk Assessment on page 5, estimates that less than 25% of Oxnard's Airports helicopter traffic may fly near the project site but the DEIR does not address impacts such as noise, created by the low flying rotary wing aircraft. While the project is well outside of the 60 CNEL contour, single-event noise levels should be considered especially during outdoor activities.

DEIR Doris/Avenue Patterson Road Educational Facilities Project

Page 3

Pages 3-98 – 3-99 Land Use Planning

Similar to comments made above, the DEIR discusses the various planning criteria concerning aircraft hazards at the federal, state and local levels and correctly states that the federal and state agencies, whose regulations are less stringent, defer local land use decisions to local agencies. The DEIR goes on to infer internal inconsistencies in the CLUP and quotes the Alternative Compatibility Policies discussed in the CLUP and used for reference as the CLUP was being developed and adopted. Those alternative policies discourage but don't prohibit development with activities that generates more than 150 people per acre in the TPZ.

A2-4

The DEIR does not include that the California Airport Land Use Planning Handbook provides further guidance when it comes to Vulnerable Occupants and provides that special consideration be afforded when risk acceptability cannot be measured simply in terms of the numbers of occupants. Again, this consideration was developed in partnership with local agencies and in consideration of local priorities giving special deference to "Vulnerable Occupants" of land uses surrounding Ventura County's airports.

Page 3-99 Land Use Planning

The DEIR incorrectly cites Table 5B of the CLUP as Land Use Compatibility Standards Related to Aircraft Noise. Instead please reference table 6A of the CLUP on page 6-2.

A2-5

Page 5-4 Alternatives to the Proposed Project

The DEIR considered two alternatives, the No Build Alternative and the Reduced Project Use Alternative and rejected a third alternative to intensify uses at existing schools. It is understandable that none of these alternatives met the project goal, that said, the project alternatives discussion should have included a discussion of building the proposed project at a different location. The DEIR does not make a case as to why this specific location provides better opportunities to meet the project goals than a location that lies outside of Oxnard Airport's Traffic Pattern Zone.

A2-6

Lastly, it is important to note that the Oxnard School District may override any finding of the ALUC but it needs to follow the guidance of Section 5.5 of the California Airport Land Use Planning Handbook with special attention paid to section 5.2 Findings. A local agency cannot simply overrule an ALUC determination without first documenting the basis for the overruling action and relating that basis directly to the purposes for which the ALUC statues were adopted. Special attention should be given to the section of the Handbook which provides guidance on Vulnerable Occupants.

A2-7

DEIR Doris/Avenue Patterson Road Educational Facilities Project
Page 4

Again thank you for this opportunity to provide comments on the Draft Environmental Impact Report (DEIR) Doris/Avenue Patterson Road Educational Facilities Project. If you have questions concerning the Ventura County Airport Land Use commission's comments please contact Mr. Steve DeGeorge, Planning Director at (805) 642-1591 Ext. 103.

**A2-7
cont.**

Sincerely,



Darren Kettle
Executive Director

Letter A2	Darren Kettle Ventura County Transportation Commission
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Response to Comment A2-1:

Comment states that the Draft EIR does not adequately inform the public of the full range of issues associated with hazards posed by aircraft and attempts to minimize the importance of the local control as exercised through the CLUP. The Draft EIR addressed potential airport hazards in Section 3.8.

As discussed in the Draft EIR, Section 3.8.2.3: “The project site lies within the Traffic Pattern Zone (TPZ) defined by the CLUP. According to the CLUP adopted land use compatibility standards in safety zones for civilian airports (CLUP Table 6B), schools are an unacceptable use in the TPZ. The VCTC, acting as the Airport Land Use Commission for Ventura County has the responsibility of making an official finding of consistency or inconsistency. In a letter addressed to Caltrans Division of Aeronautics, dated July 23, 2014, the VCTC found the proposed project to be inconsistent with the CLUP, and stated concerns related to the students’ safety in the event of an aircraft accident on-site.” The Draft EIR does not minimize the importance of the local control, stating that only local decision-makers can determine if this level of probability (for potential aircraft accidents) is acceptable to a proposed school within the Oxnard community. See response to comments 15-2 through 15-7 for responses to specific comments.

Response to Comment A2-2:

Comment states that the Draft EIR does not include consideration of local priorities giving special deference to “vulnerable occupants” as defined in Caltrans DOA California Airport Land Use Planning Handbook and that per the Handbook prohibition of facilities with “vulnerable occupants” may be the appropriate policy. The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. While the AHLRA did not specifically use the term “vulnerable occupants”, the report, when taken in full, conveys that special considerations may be applied to schools as compared to other potential land uses. The California Airport Land Use Planning Handbook discourages schools within the Traffic Pattern Zone, but does not prohibit them. It is stressed in the AHLRA and in Caltrans DOA’s findings letter that special consideration be given to schools, but that it is ultimately up to the City of Oxnard whether the risk is acceptable.

Response to Comment A3-3:

Comment states that the Draft EIR does not: include the discussion found in the AHLRA regarding the likelihood of an accident at Oxnard Airport is once every 4.2 years; explain that the TPZ has been designated as a safety zone because of increased aircraft activity inside the TPZ zone; discuss that the location of the Juan Lagunas Soria School in the TPZ for Oxnard Airport in addition to the proposed project increases the odds of a severe event; or discuss single-event noise on outdoor activities.

The Draft EIR addressed potential airport hazards in Section 3.8. The estimated occurrence every 462 years discussed in the Draft EIR refers to the accident risk at the project site as opposed to within the Oxnard Airport Sphere of Influence (SOI). The AHLRA includes calculations for both areas on pages 10 - 12 of the report (Appendix I of the Draft EIR). The calculations show an accident is likely to happen within the airport SOI on an average of once every 4.2 years. However, the project site comprises a small amount of the overall area included within the SOI. All potential accidents would not be expected to occur in one place within the SOI. The Draft EIR correctly identifies impacts to the project site.

Section 3.8 and the AHLRA discuss the TPZ. Additional information from the AHLRA will be added to Section 3.8.2.3. OSD made the following revisions to pages 3-77.

“The Ventura County Transportation Commission (VCTC) acts as the County’s Airport Land Use Commission (ALUC) per state law. The VCTC is charged with reviewing land use proposals within certain planning boundaries, with the goal of promoting compatibility between airport operations and nearby land uses. These boundaries are defined in the Commission’s Airport Comprehensive Land Use Plan (CLUP) for Ventura County. The project site lies within the Traffic Pattern Zone (TPZ) defined by the CLUP. Several “safety zones” surrounding civilian airports in Ventura County are defined in Chapter Six of the CLUP. These zones are established to provide a method of assessing the compatibility of various types of land uses with respect to aircraft operations. The three classifications are the “Runway Protection Zone” (formerly the Inner Safety Zone), the “Outer Safety Zone” and the “Traffic Pattern Zone” (TPZ). The runway protection and outer safety zones lie beneath the approach surfaces and do not affect the proposed project site. The TPZ is the least restrictive of the three zones, and is described in the 1991 CLUP as “the area beneath the most commonly used traffic pattern.” The CLUP states that within the TPZ “frequent low altitude overflights can be expected”. Most flights should follow the “typical flight path”, to the north of the site. However, those flights may still pose some risk and/or noise disturbance to the project site. Pilots flying a particularly tight traffic pattern may directly overfly the site. According to the CLUP adopted land use compatibility standards in safety zones for civilian airports (CLUP Table 6B), schools are an unacceptable use in the TPZ. The VCTC, acting as the Airport Land Use Commission for Ventura County has the responsibility of making an official finding of consistency or inconsistency. In a letter addressed to Caltrans Division of Aeronautics, dated July 23, 2014, the VCTC found the proposed project to be inconsistent with the CLUP, and stated concerns related to the students’ safety in the event of an aircraft accident on-site.

The standard metric for airport noise is CNEL (Community Noise Equivalent Level), which is a single noise level averaged for a 24 hour period. This metric would take into account the single event noise the commenter describes. While the noise levels may rise higher during an event closer to the site, the standard is based on the average of all the events during a single day. As noted in the comment and in the Draft EIR, the project site lies outside the 60 dB noise contour around Oxnard Airport, and would therefore be exempt from the noise compatibility standards given in the CLUP. In addition, the project will be designed to meet both the City of Oxnard’s and State of California interior noise level standard of 45 dBA CNEL. Noise levels from single event aircrafts may exceed the 60 dBA Leq at times throughout the day, but the project will achieve a 45 dBA CNEL for all interior classrooms.

Response to Comment A-4:

Comment states that the Draft EIR does not include consideration of “vulnerable occupants”. See Response to Comment 15-2.

Response to Comment A-5:

Comment states that the Draft EIR incorrectly cites Table 6B of the CLUP as Land Use Compatibility Standards Related to Aircraft Noise. Instead please reference Table 6A of the CLUP on page 6-2.

OSD made the following revisions to pages 3-99.

The adopted land use compatibility standards related to aircraft noise for Ventura County airports is identified in Table ~~6A~~ of the CLUP that establishes acceptable, conditionally acceptable, and unacceptable noise levels for various land uses around Ventura County Airports.

Response to Comment A-6:

Comment states that the Draft EIR should have an addressed an alternative location alternative.

As discussed in Section 5.0 of the Draft EIR, "An EIR must describe a range of reasonable and of potentially feasible alternatives to the project, or to the location of the project, which would feasibly attain most of the basic Project Objectives but would avoid or substantially lessen any significant effects. The comparative merits of the alternatives must be evaluated. An EIR need not consider every conceivable alternative, but it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The range of alternatives is governed by a "rule of reason" that requires discussion of only those alternatives necessary for the Oxnard School District (Lead Agency) to make a reasoned choice."

As discussed in the Draft EIR, Section 2. 1: "The District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. A copy of the Potential New School Sites Study is provided in Appendix B." As described in the study, the alternative locations were rejected for various factors that made siting a school at these locations infeasible. An EIR is not required to consider alternatives that are infeasible, therefore, an alternative site location was not analyzed.

Response to Comment A-7:

Comment states OSD can not overrule and ALUC determination without first documenting the basis for the overruling action. Special attention should be given to section of Handbook on "vulnerable occupants".

Section 3.8 of the Draft EIR identified project impact from airport hazards to be significant and unavoidable in order to account for a "worst-case scenario."

Section 15021(d) of the CEQA Guidelines states: "CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian. An agency shall prepare a statement of overriding considerations as described in Section 15093 to reflect the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment." Prior to implementation of the Proposed Project, the OSD must consider the EIR, must certify the EIR, and adopt the Findings of Fact, Mitigation Monitoring Program, and a Statement of Overriding Considerations.

Also see Response to Comment A-2.

A3



VENTURA COUNTY WATERSHED PROTECTION DISTRICT
 WATERSHED PLANNING AND PERMITS DIVISION
 800 South Victoria Avenue, Ventura, California 93009
 Sergio Vargas, Deputy Director – (805) 650-4077

MEMORANDUM

DATE: January 15, 2018

TO: David Fateh, Director of Facilities
Oxnard School District

FROM: Sergio Vargas, Deputy Director S.V.

SUBJECT: RMA17-014 Oxnard School District – Doris Ave/Patterson Rd.
Educational Facilities Project SCH#2017051041
Zone 2
Watershed Protection District Project Number: WC2017-0038

Pursuant to your request dated December 4, 2017, this office has reviewed the submitted materials and provides the following comments.

PROJECT LOCATION:

The project is located at southeast corner of Doris Ave and North Patterson Road, Oxnard, CA.

PROJECT DESCRIPTION:

The Oxnard School District (OSD) proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The project will include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, The Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33.

WATERSHED PROTECTION DISTRICT COMMENTS:

Comments from Advanced Planning Section:

The project proposes 13.96 acres of development which will increase imperviousness and storm runoff. However, Stormwater Drainage Section on Page 2-7 of Draft EIR for Doris Avenue/Patterson Road Educational Facility Project (Project) describes the proposed stormwater mitigation measure for the project consisting of approximately 4.5 acre-feet of storm runoff detention storage within the soccer fields by either depressing or building an 8-in earthen berm around the fields. The proposed storage will be sufficient to detain the 100-Yr frequency storm runoff from the site, thereby reducing the project

A3-1

Page 2 of 2
RMA17-014 Oxnard School District – Doris Ave/Patterson Rd. Educational Facilities Project
January 15, 2018

impacts to less than significant to Doris Drain, a Watershed Protection District jurisdictional channel and District Ordinance WP-2.

**A3-1
cont.**

END OF TEXT

Letter A3	Sergio Vargas Ventura County Watershed Protection District
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Response to Comment A3-1:

General comments were made that summarize the project description; identified the proposed project would increase imperviousness and storm runoff; and confirmed the proposed detention basin capacity would be sufficient to detain the 100-Yr frequency storm runoff from the site, thereby, reducing the project impacts to less than significant to Doris Drain, a Watershed Protection District juridical channel and District Ordinance WP-2.

No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

A4

From: Fateh, David
Sent: Friday, January 19, 2018 4:28 PM
To: 'Beltran, Richelle' <Richelle.Beltran@ventura.org>
Cc: Ozdy, Andrea <Andrea.Ozdy@ventura.org>
Subject: RE: Request extension to review the Doris / Teal Club project

Good Afternoon Richelle,

The Oxnard School District's close of comment period for our DEIR for two proposed schools in Oxnard was Wednesday, January 17, 2018 at 5:00pm. We carefully considered Ventura LAFCo's request for an extension and have decided that we cannot grant an extension of the DEIR comment period. We allowed for a 45-day review period for the DEIR which is 15 days over a standard review period of 30 days. Furthermore, if the District allowed an extension, a subsequent notice would be required. As the District noticed and received comments in a timely manner from other affected agencies and stakeholders, we believe that an extension of time would be considered unjust to the agencies and stakeholders that responded and adhered to the DEIR close of comment period deadline.

The District still welcomes a comment letter from Ventura LAFCo. We may be able to respond to comments in the Final EIR. As the Ventura LAFCo Executive Director is aware, this project will need to go through the City of Oxnard hearing processes for Planning Commission and City Council and Ventura LAFCo may respond at that time as well.

Thank you,

N. David Fateh
Director of Facilities
Oxnard School District
1055 South C Street
Oxnard, CA 93030
Office: (805) 385-1514 Ext. 2501
Fax: (805) 486-5848
Email: dfateh@oxnardsd.org

From: Beltran, Richelle [mailto:Richelle.Beltran@ventura.org]
Sent: Wednesday, January 17, 2018 2:06 PM
To: Fateh, David <dfateh@oxnardsd.org>
Cc: Ozdy, Andrea <Andrea.Ozdy@ventura.org>
Subject: Request extension to review the Doris / Teal Club project

Good afternoon, David
Andrea Ozdy, LAFCo Analyst, asked me to request an extension to review the Doris / Teal Club project. She is out of the office this week with an emergency.
Please confirm receipt of our request.

Thank you,

Richelle Beltran
Office Manager/Clerk to the Commission
Ventura LAFCo
800 S. Victoria Avenue, L#1850
Ventura, CA 93009
Tel: 805.654.2576

A4

Letter A4	<p style="text-align: center;">Richelle Beltran Ventura LAFCo</p>
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Response to Comment A4-1:

OSD received an email from Ms. Beltran on January 17, 2018 asking for an extension. On January 19, 2018 the District emailed the following reply:

“The Oxnard School District’s close of comment period for our DEIR for two proposed schools in Oxnard was Wednesday, January 17, 2018 at 5:00pm. We carefully considered Ventura LAFCo’s request for an extension and have decided that we cannot grant an extension of the DEIR comment period. We allowed for a 45-day review period for the DEIR which is 15 days over a standard review period of 30 days. Furthermore, if the District allowed an extension, a subsequent notice would be required. As the District noticed and received comments in a timely manner from other affected agencies and stakeholders, we believe that an extension of time would be considered unjust to the agencies and stakeholders that responded and adhered to the DEIR close of comment period deadline.

The District still welcomes a comment letter from Ventura LAFCo. We may be able to respond to comments in the Final EIR. As the Ventura LAFCo Executive Director is aware, this project will need to go through the City of Oxnard hearing processes for Planning Commission and City Council and Ventura LAFCo may respond at that time as well.”

As of February 16, 2018 OSD has not received comments on the Draft EIR from LAFCo.

RESOURCE MANAGEMENT AGENCY

county of ventura

A5

Planning Division

Kimberly L. Prillhart
Director

January 17, 2018

Mr. David Fateh
Director of Facilities
Oxnard School District
105 South A St
Oxnard, CA 93030

E-mail:

Subject: Comments on Proposed Doris Avenue/ Patterson Road Educational Facilities

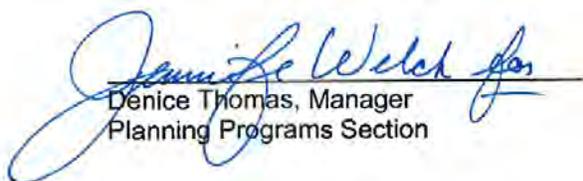
Dear Mr. Fateh,

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report for the Proposed Doris Avenue/Patterson Road Educational Facilities Project. Attached are the comments that we have received resulting from intra-county review of the subject document. Additional comments may have been sent directly to you by other County agencies.

Your proposed responses to these comments should be sent directly to the commenter, with a copy to Anthony Ciuffetelli, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Anthony Ciuffetelli at (805) 654-2443.

Sincerely,


Denice Thomas, Manager
Planning Programs Section

Attachments

County RMA Reference Number 17-014-1

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509



Printed on Recycled Paper



A5-1

Letter A5	Denice Thomas, Manager Planning Programs Section County of Ventura Resource Management Agency
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Response to Comment A5-1:

Commenter indicated that additional comments from intra-county review are attached and may have also been sent directly to OSD by other County agencies. A request that responses to these comments should be sent directly to the commenter with a copy to Anthony Ciuffetelli is acknowledged. OSD will provide responses to comments to the County agency and Mr. Ciuffetelli as requested.

No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

RESOURCE MANAGEMENT AGENCY

county of ventura

A6

Planning Division

Kimberly L. Prillhart
Director

January 17, 2018

Mr. David Fateh, Director of Facilities
Oxnard School District
1051 South A Street
Oxnard, California 93030

Subject: Notice of Completion and Availability of Draft Environmental Impact Report for the Proposed Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California — State Clearinghouse Number 2017051041

Dear Mr. Fateh,

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Doris Avenue/Patterson Road Educational Facilities Project in Ventura County, California — State Clearinghouse Number 2017051041. The Ventura County Planning Division reviewed the Draft EIR for the proposed project and provides the following response.

1. **Project Description and Limits.** The Oxnard School District (OSD) proposes to construct and operate joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 178,678 square feet of building/structures, 220 on-site parking spaces, and recreational areas including tennis courts, hard courts, and play fields. The proposed project is located on the southeast corner of the intersection of Doris Avenue and Patterson Road and within the proposed Teal Club Specific Plan. The project site is in the unincorporated area of Ventura County and within the City of Oxnard Sphere of Influence. A6-1

2. **Responsible Agency.** The Draft EIR does not identify the County of Ventura as a responsible agency for any discretionary or non-discretionary permits/approvals. The environmental analysis is predicated upon the project site being annexed into the City of Oxnard. The Teal Club Specific Plan has not been approved, nor an application submitted to the Local Agency Formation Commission (LAFCo) for annexation into the City of Oxnard therefore it may be premature to omit the County of Ventura as a Responsible Agency. If the Local Agency Formation Commission (LAFCo) denies annexation into the City of Oxnard, the Draft EIR will need to be revised to reflect the County of Ventura as the responsible agency with permitting and approval authority. A6-2

3. **Initial Study Assessment Guidelines (ISAGs).** To assist with the environmental review required under the California Environmental Quality Act (CEQA)

800 South Victoria Avenue, L# 1740, Ventura, CA 93009 (805) 654-2481 Fax (805) 654-2509



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the County of Ventura adopted Initial Study Assessment Guidelines (ISAGs) by topical area that provide threshold criteria and standard methodology used in determining whether or not a project (individually or cumulatively with other projects) could have a significant effect on the environment. These guidelines can be found on the County's website. We request this document be consulted if/when preparing a revised Draft EIR. | A6-2 cont.

4. **Potential Environmental Impacts.** The Draft EIR analysis should include potential impact areas previously identified in past Planning Division letters on the Teal Club Specific Plan and the School Site, specifically Agricultural Resources, Noise (including Vibration/Noxious Odors), Hazards & Hazardous Materials, and Land Use/Planning. | A6-3
5. **Construction Staging.** On and -offsite construction and staging areas (including construction worker parking) should be identified on a site plan | A6-4

Conclusion/Additional information needed. The Draft EIR has been prepared citing City of Oxnard as the responsible agency and permitting authority. Ventura County Planning staff respectfully requests the aforementioned comments be taken into consideration. This will assist Ventura County Planning staff in its review of the proposed Doris Avenue/Patterson Road Educational Facilities Project and the assessment of potential environmental impacts. | A6-5

Thank you again for the opportunity to comment. Should you have any questions please contact me at 805-654-3327 or via email at linda.blackburn@ventura.org

Sincerely,



Linda Blackburn, Senior Planner
Long Range Planning Section
Ventura County Planning Division

Cc: File RMA#17-014-1 (Associated Projects: RMA#17-014, RMA#12-016, RMA#12-016-1)

Letter A6	Linda Blackburn Ventura County Planning Division
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Response to Comment A6-1:

Commenter provided a general summary of the proposed project and indicated the proposed project is located on the southeast corner of the intersection of Doris Avenue and Patterson Road and within the proposed Teal Club Specific Plan.

OSD would like to clarify that while the proposed project is located on the southeast corner of the intersection of Doris Avenue and Patterson Road; however, it is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City of Oxnard that includes the project site with a different development scenario.

Response to Comment A6-2:

General comment that the Draft EIR does not identify the County of Ventura as a responsible agency for any discretionary or non-discretionary permits/approvals. The Teal Club Specific Plan Project has not been approved nor has an application been submitted to LAFCo for annexation into the City of Oxnard. Therefore, it may be premature to omit the County of Ventura as a Responsible Agency. If LAFCo denies the proposed project, the Draft EIR will need to be revised to reflect the County of Ventura as the responsible agency with permitting and approval authority. The County of Ventura has Initial Study Assessment Guidelines that should be consulted if/when preparing a revised Draft EIR.

The Doris Avenue Patterson Road Educational Facilities Project is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City of Oxnard that includes the project site with a different development scenario.

The Doris Avenue Patterson Road Educational Facilities Project Draft EIR evaluated the environmental impacts for the project as proposed, which includes annexation into the City of Oxnard as identified in Section 2.4, Project Description, of the Draft EIR. Anticipated discretionary actions for the proposed project were identified in Table 2-1 of the Draft EIR. In addition to discretionary actions, additional state, regional and/or local government permits may be required to develop the proposed project, whether or not they are explicitly listed in Table 2-2, was acknowledged on page 2-9 of the Draft EIR. The EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components.

Should changes to the project description occur in the future, OSD acknowledges that additional environmental evaluation may be warranted.

Response to Comment A6-3:

Commenter says the Draft EIR analysis should include potential impact areas previously identified in past Planning Division letters on the Teal Club Specific Plan and the School Site, specifically Agricultural Resources, Noise (including Vibration/Noxious Odors), Hazards & Hazardous Materials, and Land Use/Planning.

The Doris Avenue Patterson Road Educational Facilities Project is not part of the “Teal Club Specific Plan Project.” OSD has not received comments from the County related to the Teal Club Specific Plan Project.

Comment letters received by OSD from agencies and individuals in response to the NOP are identified in Table 1-2 and included in Appendix A of the Draft EIR. As identified in the EIR, OSD received comments from the County in response to the NOP including:

- Resource Management Agency County of Ventura
- County of Ventura, Public Works Agency, Transportation Department
- County of Ventura Department of Airports
- Ventura County Planning Division
- Ventura County Watershed Protection District
- Ventura County Air Pollution Control District
- County of Ventura, Public Works Agency

The content of the Doris Avenue Patterson Road Educational Facilities Project EIR was established based on the findings in the Initial Study (IS) and input received from agencies and individuals (including the County) during the public scoping process. No specific issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment A6-4:

General comment that on-and off-site construction staging areas (including construction worker parking) should be identified on a site plan.

OSD acknowledges the suggestion that on-and off-site construction staging areas should be identified on the site plan. No specific issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment A6-5:

Comment that the Draft EIR was prepared citing the City of Oxnard as the responsible agency and permitting authority and that Ventura County Planning staff respectfully requests their aforementioned comments be taken into consideration.

The Doris Avenue Patterson Road Educational Facilities Project Draft EIR evaluated the environmental impacts for the project as proposed, which includes annexation into the City of Oxnard as identified in Section 2.4, Project Description, of the Draft EIR. Comments received in response to the Draft EIR are part of the environmental record and will be considered by OSD. No specific issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

A7

**VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT**
Memorandum

TO: David Fateh, Director of Facilities,
Oxnard School District

DATE: January 3, 2018

FROM: Alicia Stratton

SUBJECT: Request for Review of Draft Environmental Impact Report (DEIR) for the Doris Patterson Educational Facilities Project, Oxnard School District (Reference No. 17-014-1)

Air Pollution Control District staff has reviewed the DEIR for the project, which proposes construction and operation of a new elementary and middle school and District administrative center on a 25-acre site. The proposed project would support a district office, 700 elementary school students in grades K-5 and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 178,678 sq. ft. of building and structures and provide 220 parking spaces onsite. The project includes a variety of recreational areas onsite including tennis courts, hard courts, and play fields located to the south of the school buildings. The project includes a proposed reorganization that will be comprised of an annexation into the City of Oxnard and the Callegues Municipal Water District and a detachment from the Ventura County Fire Protection District, Ventura County Resource Conservation District and Ventura County Service Areas 32 and 33. The project location is the southeast corner of Doris Avenue and North Patterson Road in Oxnard.

A7-1

Section 3.3, *Air Quality*, and Appendix C of the DEIR address air quality issues pertaining to the project. We have reviewed these discussions and concur with the assumptions and findings of the analysis that significant long-term, operational air quality impacts would not result from the project. Table 3-10, *Project Operation Emissions of Criteria Pollutants* (Page 3-28) indicates that long-term emissions from the project would be below VCAPCD's 25 lbs/day threshold as described in the Ventura County Air Quality Assessment Guidelines (13.5 lbs/day ROG and 17.10 lbs/day NO_x). Short-term, construction-related air quality emissions are presented in Table 3-9, *Project Construction Emissions of Criteria Pollutants* (Page 3-27), and would exceed the 25 lbs/day threshold, however these are temporary and therefore not counted toward air quality impact analysis because they do not contribute to long-term air quality impacts.

A7-2

Potential short-term air quality impacts from site preparation, grading and construction activities would be mitigated by implementation of Section 3.3.2.5, Mitigation Measures, specifically AQ-1, which outlines specific steps that the contractor shall take to reduce short-term emissions to a level of less than significant. We recommend the following requirement be added to this mitigation measure to enable citizens to address potential fugitive dust problems from project construction:

**A7-2
cont.**

Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours.

Potential exposure of sensitive receptors to substantial pollutant concentrations was analyzed in the DEIR as well. We have reviewed this discussion and Table 3-11, *Screening Health Risk Assessment* and Table 3-12, *Carbon Monoxide Analysis*. Both of these analyses indicate that potential health risks related to construction equipment and vehicle emissions would be less than significant. No additional air quality mitigation is necessary.

A7-3

Thank you for the opportunity to review this project. If you have any questions, please call me at (805) 645-1426 or email alicia@vcapcd.org.

Letter A7	<p style="text-align: center;">Alicia Stratton</p> <p style="text-align: center;">Ventura County Air Pollution Control District</p>
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Response to Comment A7-1:

General summary of the project description was provided. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment A7-2:

Section 3.3, *Air Quality*, and Appendix C of the DEIR address air quality issues pertaining to the project. Commenter reviewed these discussions and concurs with the assumptions and findings of the analysis that significant long-term, operational air quality impacts would not result from the project. Potential short-term air quality impacts from site preparation, grading and construction activities would be mitigated by implementation of Section 3.3.2.5, Mitigation Measures, specifically AQ-1, which outlines specific steps that the contractor shall take to reduce short-term emissions to a level of less than significant. Commenter recommends the following requirement be added to AQ-1 to enable citizens to address potential fugitive dust problems from project construction:

“Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours.”

As identified on page 3-31 of the Draft EIR, Mitigation Measure AQ-1 is provided to meet VCAQMD and CARB compliance requirements. No deficiencies in the environmental analysis were identified by the commenter. The Commenter’s recommended requirement for Mitigation Measure AQ-1 would require public posting of the APCD Compliant Telephone number and by itself would not reduce any physical impacts on the environment. As such, OSD added the recommended requirement to AQ-1: Mitigation Measure AQ-1 and revised section 3.3.2.5 of the EIR as follows:

AQ-1: During project construction the contractor shall ensure that:

- All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
- All clearing, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (mph) (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20% or greater opacity impact public roads, occupied structures, or neighboring property.
- All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.
- All haul trucks shall be required to exit the site via an access point where a gravel pad or grizzly has been installed.
- Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
- Once initial leveling has ceased, all inactive soil areas within the construction-site shall either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission.
- On-site vehicle speed should be limited to 15 mph.
- All areas with vehicle traffic should be paved, treated with dust palliatives or watered a minimum of twice daily.

- Properly maintain and tune all internal combustion engine powered equipment;
- Require employees and subcontractors to comply with the CARB idling restrictions for compression ignition engines; and use California ultra-low sulfur diesel fuel; use construction equipment with Tier 2 engines; and use interior and exterior paint with a VOC content of 100 grams per liter.
- Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours.

Response to Comment A7-3:

Commenter noted that potential exposure of sensitive receptors to substantial pollutant concentrations was analyzed in the Draft EIR. The APCD reviewed this discussion and Table 3-11, *Screening Health Risk Assessment* and Table 3-12, *Carbon Monoxide Analysis*. Both of these analyses indicate that potential health risks related to construction equipment and vehicle emissions would be less than significant. No additional air quality mitigation is necessary.

OSD acknowledges APCD comments associated with the review of the Draft EIR discussion related to exposure of sensitive receptors to substantial pollutant concentrations and provided a summary of the EIR findings. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

A8

Development Services

Planning Division
214 South C Street
Oxnard, California 93030
(805) 385-7858
Fax (805) 385-7417



January 17, 2018

Oxnard School District
Mr. David Fateh, Director of Facilities
1051 South A Street
Oxnard, CA 93030

RE: City of Oxnard Comments on DEIR for Doris Avenue and Patterson Road Educational Facilities Project Proposed by the Oxnard School District

The City of Oxnard (City) has received and reviewed the Draft Environmental Impact Report (DEIR) for the proposed Doris Avenue and Patterson Road Educational Facilities Project (proposed project) by the Oxnard School District (OSD). OSD proposes to construct and operate joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. According to the DEIR, the project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, State of California as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of approximately 25 acres.

The City is currently processing the Teal Club Specific Plan (TCSP), which includes the project site, and involves the annexation of an approximately 174.6-acre project area to the City of Oxnard, adoption of a specific plan including a range of land uses for the TCSP area, a General Plan Amendment, and Pre-zoning to support development in accordance with the TCSP. The project is bounded by Doris Avenue on the north, Patterson Road on the west, Teal Club Road on the south, and Ventura Road on the east. The additional 11.4-acre annexation area south of Teal Club Road is located north and west of Little Farms Road and bisected by Mallard Way.

The City issued a Notice of Availability of a Draft EIR on August 3, 2015. The public comment period for the DEIR ended on October 5, 2015. Upon learning of the OSD's interest in constructing a 25 acre school within the boundaries of the TCSP, City work efforts to respond to public comments were suspended pending a definitive outcome of OSD acquisition of the subject property. The City acknowledges that the project description and land plan along with specific DEIR sections will need to be revised to reflect operation of the OSD project. The application for the TCSP is still active and currently being processed by the City.

The OSD Project lies within the TCSP; the OSD DEIR does not disclose the relationship between the Project site and the TCSP. In order for an accurate assessment of the potential

A8-1

City of Oxnard
 OSD DEIR Comments
 January 17, 2018
 Page 2

impacts, it would necessary to disclose the relationship between the proposed Project and the TCSP.

**A8-1
 cont.**

City of Oxnard DEIR Comments

City comments follow DEIR Sections as follows:

Project Description

Utilities Connection

Under the 'Utility Connections' section of the Project Description (pg. ES-4), the DEIR states that there will be a discussion "with the City Public Works Department during design will determine if the 8- or 15-inch diameter pipeline is connected to for serving the project site. The addition of the proposed project is assumed to not cause capacity improvements in the existing collection system (Phoenix 2017)." The DEIR does not seem to include calculations or other evidence that seem to collaborate that either of these existing lines has capacity for the additional wastewater generated by the project. The 15" line was installed many years ago to serve the northerly neighborhoods and was found to have insufficient capacity for Oxnard High School when the school was relocated to Gonzales Road. The 8" line was installed to serve the high school and was required by a mitigation measure of the high school EIR to be sized such that it did not promote development. Insufficient information has been provided to determine the potential impacts on the existing wastewater pipes on Patterson Road.

A8-2

On page ES-5, the DEIR discusses overhead power facilities. The DEIR does not indicate compliance with City Ordinance 2207 which, among other things, requires all new developments of 10 acres or more to place all existing overhead facilities along the project's frontage underground.

A8-3

Storm Drainage

The 'Stormwater Drainage' section of the Project description of the DEIR (pg. ES-4), notes that the project will comply with the Ventura County Technical Guidance Manual (TGM) and discusses how the MS4 requirements will be implemented for onsite improvements. The project is noted to include construction of a new public access road along the easterly boundary as well as the widening of Doris Avenue and widening of Patterson Avenue. These 'public' improvements exceed the threshold for requiring implementation of long-term post-construction best management practices in compliance with the Ventura County TGM. There is no discussion of how these impacts will be mitigated and insufficient information to determine the impacts.

A8-4

Section 2.5 –Required Permits and Approvals

The project proponent must ensure compliance with regulatory, planning, and permit requirements in all affected jurisdictions, including the City of Oxnard. The OSD should coordinate with the City of Oxnard and Local Agency Formation Commission (LAFCo) to discuss a proposed General Plan and Pre-Zone application and the initiation of application for reorganization before LAFCo and the relationship of the proposed OSD project with the TCSP. The DEIR should also indicate what entity would be the responsible agency when seeking

A8-5

City of Oxnard
 OSD DEIR Comments
 January 17, 2018
 Page 3

annexation through LAFCo.

Considering that the TCSP project is only a proposed project, please provide an explanation as to why you are seeking annexation into the City of Oxnard.

A8-6

The DEIR fails to include the County of Ventura (County) as a responsible agency based on the premise that the Project is located within the City's Sphere of Influence (SOI) and in an area identified for buildout in the 2030 General Plan, and will be annexed into the City. The DEIR is correct in stating that the Project area is identified in the 2030 General Plan as a build out area but the proposed Project was not a land use that was anticipated to be included. Additionally, the land use is not an allowed land use within the existing General Plan designation and will require approval of a General Plan Amendment and Pre-zone by the City Council. Subsequently, an annexation will be required to be approved by LAFCo. If any of the two efforts mentioned above fails, the Project site will remain located within the County and will be required to conform to the County's regulatory requirements if the Project moves forward.

A8-7

The Project site is located within the TCSP project area which is currently being processed by the City. Additionally, the application is inclusive of an annexation request. The DEIR fails to identify the relationship between the Project and the TCSP. The DEIR seems to draw a conclusion that the TCSP will be approved by the City and that an annexation will be eventually approved by LAFCo. It is important to note that the TCSP is required to go through the City's project application process, which will require noticed public hearings and decision makers to make independent decisions based on facts and findings presented to them. It is not a forgone conclusion that the TCSP will be approved and the DEIR does not take that into account in its analysis.

A8-8

Under the project description in the DEIR, it states that an amendment to the City of Oxnard's sphere of influence is required to include the adjoining segment of Patterson Road and agricultural land to the west. However, the DEIR does not include details pertaining to the amount of road and agricultural land to the west that is proposed to be included in the SOI Amendment. Further discussion of the City's comments regarding the proposed reorganization is provided in the Land Use section of this correspondence.

A8-9

3.1 Aesthetics

Section 3.1.1 – Existing Conditions

The DEIR correctly identifies Patterson Road between Fifth Street and Hemlock Street and between Vineyard Avenue and Doris Avenue; and Doris Avenue between Victoria Avenue and Patterson Road as City designated Scenic Routes. However, it fails to mention that the City's 2030 General Plan designates Ventura Road, east of the project site, as a Scenic Route as well. The DEIR should include an analysis of potential Aesthetic impacts from Ventura Road. Please visit the City of Oxnard Planning website to review the designated Scenic Highways and Roadway Map in its entirety: <https://www.oxnard.org/wp-content/uploads/2017/05/Scenic-Routes-11x17-4.17.pdf>.

A8-10

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Section 3.1.2.3 – Project Impacts

As stated in the aforementioned City comment pertaining to Section 3.1.1, the DEIR fails to identify Ventura Road as a City designated Scenic Route. The DEIR identifies Patterson Road between Fifth Street and Hemlock Street and between Vineyard Avenue and Doris Avenue; and Doris Avenue between Victoria Avenue and Patterson Road as City designated Scenic Routes. While the DEIR concludes that project impacts to visual character and quality would be less than significant and no mitigation measures are required, the City of Oxnard is unable to verify or confirm the DEIR analysis or the conclusion because the DEIR does not include a proposed landscape plan and architectural elevations to confirm the analysis of the potential impacts the Project might have on visual resources. In addition to a landscape plan and architectural elevations, the DEIR should include photo simulations of the proposed Project from all the vantage points of all surrounding scenic resource roadways in order to assist in determining the potential impact the Project might have on visual resources.

A8-11

The DEIR states that while the project will introduce new sources of light and glare, the change will be consistent with the existing light associated with the adjacent neighborhoods and roads. However, a glare analysis and lighting plan was not included in the DEIR in order to make an assessment if the project might adversely affect daytime or nighttime views in the area. Additional concern is warranted if OSD plans on utilizing solar panels, which could pose a threat to aircraft and air tower personnel. Please address this deficiency.

A8-12

3.2 Agriculture

3.2.2.3 Project Impacts

The DEIR concludes that the Project is not subject to the County's land use designation regulations, which includes the County of Ventura Agricultural/Urban Policy which requires a 300-foot buffer between a non-agriculture use and agriculture use because the Project is seeking approval of a General Plan Amendment, Pre-zone and Annexation through the City. However, the DEIR fails to analyze the Project in case the General Plan Amendment and Pre-zone are not approved by the City, or if LAFCo does not approve the annexation. If the City were to seek annexation of the Project site without the TCSP project area, the proposal could be in conflict with LAFCo's Commissioner Handbook Section 3.3.2.2, "LAFCo Discourages Applications with Boundaries that: (a) Split neighborhoods or divide an existing identifiable community, commercial district, or other area having a social and economic identity. (b) Create areas where it is difficult to provide services. (c) Create boundaries which result in islands, peninsulas, flags, 'pinpoint contiguity,' 'cherry stems,' or cause, or further, the distortion of existing boundaries (d) are drawn for the primary purpose of encompassing revenue-producing territories." As such, it is important that the DEIR identify the relationship between the Project and the TCSP.

A8-13

The DEIR does not seem to provide an analysis that describes the potential operational and economic impact the Project might have on surrounding agricultural uses. Section 3.2.1.1 states that within Ventura County, agriculture plays a vital role in the economy and it consistently ranks among the most profitable in California. It is unclear if the Project might restrict operational uses on the existing farms. Restricting operational uses on surrounding agriculture

A8-14

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lands has the potential to also decrease their economic viability. The DEIR should provide further analysis of the potential operational and economic impact the Project might have on the surrounding agricultural uses.

**A8-14
 cont.**

3.3 Air Quality

Section 3.3.2.3 – Project Impacts

The air quality project impact analysis includes operational activities associated with the project such as motor vehicles, facility upkeep, machinery associated with school structures but it is not clear if the analysis included emissions associated by aircraft and/or activities and machinery associated with the Oxnard Airport. Additionally, it is unclear if the air quality analysis included emissions/pollutants associated with farming operations from the surrounding agricultural fields. Activities associated with aircraft, airport, and nearby farming activities should be included in the cumulative air quality analysis, since children and school district staff would be exposed to these pollutants.

A8-15

Section 3.3.2.5 – Mitigation Measures

An additional mitigation measure should be required that requires OSD to provide a letter containing the APCD complaint telephone number (805/645-1400 during business hours; 805/654-2797 after hours) to all property owners within the surrounding established neighborhoods and OSD student parents (guardians) to report odor complaints. It is also recommended that this contact information be posted on a sign(s) affixed to the outside of the Project site to ensure this contact information is readily available to persons frequenting the school site.

A8-16

3.4 Hazards and Hazardous Materials

Section 3.8.1.2- Regulatory Setting

The City is concerned that the proposed project is not consistent with the Airport Comprehensive Land Use Plan for Ventura County (CLUP 2000). The CLUP identifies acceptable land uses within the various zones and the proposed Project is not an acceptable use within the Traffic Pattern Zone (TPZ) in which the Project lies. If the OSD decides to continue with the Project within the proposed location, the Applicant should expect that concerns regarding land use and airport compatibility, safety, and traffic to name a few will be of vital concern to decision makers and residents when the Applicant seeks approval of a General Plan Amendment and Pre-Zone, as well as Annexation to allow the use as proposed.

A8-17

The City's 2030 General Plan identifies goals and policies that guide development within the Oxnard Airport area. The City of Oxnard is committed to guiding development that is consistent within the Oxnard Airport, as reflected in its 2030 General Plan, which identifies numerous goals and policies for development within the Oxnard Airport:

- GOAL SH-9: Oxnard Airport operations are at an acceptable risk and compatible with surrounding land uses and activities.
- Policy SH-9.1 *Airport Land Use Compatibility Plans:*

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- Require development around the Oxnard and Camarillo Airports to be consistent with the safety policies and land use compatibility guidelines contained within the Ventura County Airport Land Use Plan.
- Policy SH-9.2 **Compliance with FAA Regulations**
 Ensure development within the airport approach and departure zones are in compliance with applicable Federal Aviation Administration regulations that address objects affecting navigable airspace.
- Policy SH-9.3 **Location of New Schools Relative to the Oxnard Airport**
 Encourage new school facilities to be located in a manner consistent with the Ventura County Airport Comprehensive Land Use Plan subject to consultation with the Ventura County Department of Airports, California Department of Aeronautics, the Oxnard School District, the Oxnard Unified High School District, and the Department of Education.

A8-17
 cont.

Additionally, the DEIR did not include flight and/or operational incident information associated with the Oxnard Airport. The DEIR should include incident reports to determine the frequency of incidents associated with the Oxnard Airport and the associated hazard/risk assessment.

Section 3.8.2.5 Mitigation Measures

The City recommends that an additional mitigation measure be incorporated detailing a student and staff disaster plan that shall be available to all employees and student parents (guardians) in case of a “worse case” scenario.

A8-18

3.10 Land Use and Planning

Section 3.10.2.3 Project Impacts

The City reaffirms that the current 2030 General Plan land use designation for the site does not permit the development of a school and that a General Plan Amendment and Pre-zone will be required along with an Annexation request to LAFCo. However, the City is currently processing the TCSP which involves the annexation of the subject area, including adoption of a specific plan including a range of land uses for the TCSP, a general plan amendment, and pre-zoning to support development in accordance with the TCSP. The proposed Project is located within the proposed TCSP area and the DEIR is not clear as to how both of these proposals relate to each other. Please clarify the relationship between the Project and the TCSP so that the general public and decision makers have a clear understanding of the future development and impacts of the Project area.

A8-19

On July 9, 2017, LAFCo staff provided the Project proponent with a response to the DEIR Notice of Preparation (NOP). The NOP response letter indicated that the territory to the west of the proposed Project which is intended to be used for widening of Patterson Road appeared to be located outside of the City’s CURB and voter approval seemed to be required for the extension of City services outside of the designated City’s Curb. LAFCo also indicated that the same portion of land was located within the Ventura-Oxnard Greenbelt and that LAFCo policies generally provide that LAFCo will not approve proposals that are in conflict with greenbelt

A8-20

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agreements, unless exceptional circumstances exist. LAFCo indicated that an analysis of both issues should be included in the DEIR. Based on the information analysis included in the DEIR, it does not appear to be an indication whether the territory in question is located or not located in the City's CURB and Ventura-Oxnard Greenbelt. Additionally, the DEIR does not provide specifics regarding the amount of road and territory that will be annexed as part of the subject Project. The DEIR should address these concerns.

**A8-20
 cont.**

As previously stated, the Project does not clarify the relationship between the project and TCSP. However, the DEIR draws a number of conclusions which include that the TCSP will be annexed into the City. It is important to note that the TCSP is currently being processed and that the decision to approve the TCSP, or a revised version of it, will be done so by the City's decision makers during noticed public hearings based on fact and findings presented to them. The DEIR should include an analysis of the Project without the TCSP. The analysis discussion will also provide a clear understanding of the required annexation procedures and whether an annexation into the City is viable. If the Project seeks annexation without the TCSP being approved, the proposed annexation might be in conflict with LAFCo's Commissioners Handbook Section 3.3.2.2., which states, "LAFCo Discourages Applications with Boundaries that: (a) Split neighborhoods or divide an existing identifiable community, commercial district, or other area having a social and economic identity. (b) Create areas where it is difficult to provide services. (c) Create boundaries which result in islands, peninsulas, flags, 'pinpoint contiguity,' 'cherry stems,' or cause, or further, the distortion of existing boundaries (d) are drawn for the primary purpose of encompassing revenue-producing territories."

A8-21

3.11 Noise

Section 3.11.2 .3-Project Impacts

The DEIR states that the Project is situated just outside of the 60 dBA (A-weighted Decibels) CNEL (Community Noise Equivalent Level) contour but it should be noted that the development will routinely experience overflight of aircraft with single event noise exceeding 65 dBA routinely.

A8-22

3.13 Public Services and Recreation

Section 3.13.2 .4-Project Impacts

Oxnard Fire Department

Further evaluation of the project is needed in greater detail to provide a concrete analysis of the Project. Please contact Sergio Martinez (Fire Marshall – (805) 385-7720) with the Oxnard Fire Department.

A8-23

Oxnard Police Department (OPD)

The site plans included in the DEIR and associated studies seem to be inconsistent with each other. Please provide a site plan, inclusive of all off-site improvements, that represents the proposed Project.

A8-24

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Based on site plan provided on page 2-6 of the DEIR, the OPD identified ten driveway/pedestrian conflict sites. These conflicts required to be significantly reduced for a school site. If it is the intent for the City to annex the subject site, please address the following:

- Pedestrian activity along Patterson Road is anticipated to be significantly less than that of Doris Avenue based on neighboring uses and the residential neighborhood located to the north. Access driveways to the parking lots serving the District Office and the Elementary School should be accessed off of Patterson Road eliminating the need for the access points on Doris Avenue.
- The Elementary Bus Drop-Off should be located on Patterson Road with an east-west walkway that is physically separated from the parking areas to provide student access to the elementary campus.
- Sidewalk along Doris Avenue should be extra wide and abut against the curb. This curb should be designated 'No Parking' and utilized as a pick-up/drop-off zone. The sidewalk should follow the curb of the Junior High Bus Drop-off. A planter or similar divider should be placed where the sidewalk meets the Junior High Buss Drop-off to guide pedestrians to follow the sidewalk and not shortcut through the drop-off zone. This eliminates all the vehicle/pedestrian conflicts sites on Doris Avenue and moves them to the west and east sides of the site. The west and east sides of the sites are not likely to be contain as much pedestrian traffic due to expected neighboring land uses.
- The proposed median on Doris Avenue east of Patterson Road should be designed to highly discourage mid-block crossing. This is best done with physical barriers such as fencing, elevated planters or similar pedestrian obstacles. Please coordinate with the City Public Works Department to design appropriately.
- If fencing is proposed around this site, it should be designed to complement pedestrian travel paths and pick-up/drop-off zones.
- Three parking stalls at each campus should be designated for 'Visitor Use Only' and should be the closest stalls to the site office.

A8-25

Water/Wastewater

Based on the analysis and studies provided on the DEIR, staff is unable to make a determination of the level of significance of potential impacts the Project might pertaining to water and waste water. Please coordinate with the City's Public Works Department to determine the appropriate studies that are required to be submitted to make a determination of significance.

A8-26

3.14 Transportation and Circulation

Section 3.14.2.3-Project Impacts

The traffic study included in the DEIR does not meet the minimum requirements of City Council Resolution 10,418 regarding the preparation and submittal of traffic studies. A revised traffic study must conform to City requirements including, but not limited to, the following excerpt from the resolution:

A8-27

- A) If the project is in conformance with the General Plan, all of the following must be studied:

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- i) Existing (roadway counts reflecting all completed and occupied construction projects to date)
 - ii) Existing, plus approved (projects which have been approved by the City but are not yet occupied), plus pending (projects for which applications have been filed and are currently being processed, but have not yet received final approval)
 - iii) Existing, plus approved, plus pending, plus project (the subject proposed project, not yet finally approved by the City)
- B) If the project is part of the General Plan Amendment, consideration must be given to the ultimate impact on the master plan network. Thus, the following additional scenarios must be studied:
- i) Year 2030
 - ii) Year 2030 plus project

**A8-27
 cont.**

The Traffic Study included in the DEIR seems to not analyze the Project's impacts on the following intersections which the City believes may be significantly impacted by the Project:

A8-28

- a. Gonzales Rd and Ventura Rd
- b. Doris Ave and Ventura Rd
- c. Ventura Rd and Teal Club/Second St.
- d. Ventura Rd and Fifth St.

On Pages ES-49 and ES-50 of the DEIR, Mitigation Measures TRAF-1 through TRAF-4 state that the mitigations will be satisfied by the payment of a fair share contribution to the City. City Ordinance 10,453 dictates that the City Public Works Director has the option of accepting payment or requiring construction of the improvements. All of these mitigation measures must be altered to comply with City Ordinance allowing the Director to require mitigation construction by the Applicant/OSD. It is highly likely that the Director will require construction by the Applicant/OSD. The description of the extent of the improvements required by each mitigation measure is not clear in the mitigation measure wording. The full impact of the project cannot be analyzed and further analysis and study is needed for the City to provide full comments.

A8-29

On Page ES-4 of the DEIR, the Transportation/Circulation section indicates that the project description includes construction of sidewalk improvements along the property but doesn't provide any indication of the anticipated roadway improvements. The full impacts of the project cannot be analyzed if the project description doesn't indicate the number of lanes that will be constructed in each direction, bike lanes, median width including proposed dimension. These documents should include a general description of the right-of-way that will be dedicated to the City for the roadway improvements. Roadway improvements along the project frontages per City policy are to include construction of the full half width on the project side of the roadway plus one lane (plus full median width including landscaping) along both Patterson and Teal Club. Figure 7 of the traffic study titled 'City of Oxnard General Plan Roadway Cross-Sections'

A8-30

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illustrates roadway cross sections. However, the dimensions on these cross-sections are not accurate and must be revised to show travel way widths measured from median curb to gutter curb. It is recommended that the applicant contact the City's Traffic Division to discuss alternative cross-section that comply with those associated with existing conditions and potential future Teal Club Specific Plan requirements.

**A8-30
 cont.**

The DEIR indicates that the project will add significantly to the daily traffic trips on Teal Club Road and Doris Avenue. The current configuration of the portions of these roads between Ventura Road and Victoria Avenue include existing drainage ditches directly adjoining the roadway. The DEIR should evaluate the impacts of these additional trips on the safety of the current design considering that these roads were designed as rural farm roads and their nature is being altered by these additional trips.

A8-31

On page ES-49, Section 3.14 under mitigation measure 'TRAF-3', the DEIR indicates an impact to Patterson Road and requires mitigation to widening of this roadway. The impacts to Doris Avenue are very similar and there needs to be a similar mitigation measure for the widening of Doris Avenue.

A8-32

The documents contained within the DEIR are inconsistent regarding the extent and location of any public or private streets along the eastern and southern boundary of the project. These documents also do not provide any discussion of the location of any proposed median breaks or turn-pockets. Full review of the project cannot be provided without a clear understanding of the proposed Project improvements.

A8-33

The proposed multiple consecutive curb cuts (driveway openings) along Doris Avenue between Buildings 10 and 13 do not appear to comply with City of Oxnard Zoning Ordinance on curb cut spacing. Compliance with the City ordinance regarding driveway spacing could significantly affect the project layout.

A8-34

The Project documents do not adequately analyze the pedestrian and vehicular conflicts along the Doris Avenue frontage of the site. Based on the provided traffic study, almost 1,000 morning peak hour trips are forecasted to be generated by the Project. If vehicular access to the site is from Doris Avenue, potential queueing problem may occur during that time period. Separating the vehicular access from the pedestrian access to the school site will address the safety and queueing concern. For example, vehicular access can be located along Patterson Road and the proposed access road at the easterly edge of the project while pedestrian access can be along Doris Avenue.

A8-35

3.15 Utilities and Service Systems

3.15.2.3 Project Impacts

The DEIR and Project discussion do not provide sufficient information to determine all potential impacts of the project. The current project as described does not comply with City standards, ordinances, and policies. Project components such as distance between driveways, construction

A8-36

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of full improvements (including utilities) along the project frontage, placement of overhead utilities underground and conveyance of stormwater to a safe point of discharge are some of the components that are unclear, or that are clearly not mitigated. We request that a meeting be scheduled with City staff to discuss the proposed project in greater detail and clarify the scope of the improvements proposed as a part of the project.

**A8-36
cont.**

On pages ES-60 and 3-140, the DEIR states that the City anticipates expansion of the plant to 39.7 mgd by 2020. There are no current plans for an expansion within the timelines mentioned in this paragraph. This statement appears to reference documents from 2007 that are out of date. The current capacity is 31.7 mgd.

A8-37

On page 3-135, in the second paragraph, The DEIR indicates that two sewer trunks (Redwood and Western) provide sewer service to the project area. Connection to the existing wastewater lines in Patterson Road as proposed in the DEIR would convey wastewater west in Teal Club to the Western Trunk in Victoria Avenue. Connection to the mentioned Redwood Trunk line would most likely require the construction of a wastewater lift station. This paragraph further states that “the Western Trunk Sewer is currently operating near design capacity” and references a Kennedy/Jenks Consultants study from 2007. If this line was “near design capacity” in 2007 a new or updated study is required to address all projects that have connected to that line in the intervening 11 years and all projects that have been approved to connect but have not yet starting contributing flows. The DEIR provides insufficient information to determine the potential impacts on the existing downstream wastewater system.

A8-38

On Page ES-40 in the first paragraph (also ES-56), the DEIR discusses conveyance of site drainage and indicates that the project will include construction of downstream facilities within Patterson Road compatible with the City Master Plan of Drainage. The DEIR documents do not indicate that the project will include construction of any improvements further downstream. The document also states that the Patterson Road storm drain improvements will be discharged “to the existing Teal Club Road facility as documented in the City of Oxnard Drainage system Master Plan.” There is no analysis or discussion of the capacity and stability of the existing ‘ditch’ along Teal Club to convey this additional stormwater. This ditch has historically been used as an agricultural ditch serving the adjacent farm fields. Ownership of the ditch and the associated maintenance is not clear. The DEIR provides insufficient information to determine the potential impacts on the existing downstream stormwater system in conveying the project stormwater to a safe point of discharge.

A8-39

On Page ES-56, the DEIR indicates that MS4 post-construction BMPs are required and that they will incorporate compliance with the Ventura County TGM in the project design. The DEIR further states that “Onsite hydrodynamic treatment systems will treat the storm water prior to discharge to the offsite system.” The current TGM requires the project to infiltrate the Stormwater Quality Design Storm and does not allow for its discharge offsite unless ‘technical infeasibility’ is proven for the site. The DEIR does not provide any discussion of technical infeasibility regarding providing the required onsite infiltration. There is no discussion of testing

A8-40

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for onsite infiltration rates that will be sufficient to meet MS4 permit requirements.

**A8-40
 cont.**

On Page 3-88, in the fourth paragraph (and Page 3-141), the DEIR states that compliance with the Ventura County TGM will be achieved by construction of a “dry extended detention basin” which are described in the TGM as “basins having outlets designed to detain the storm water quality design volume (SQDV) for 36 to 48 hours to allow sediment particles and associated pollutants to settle and be removed.” Construction of a dry extended detention basin (with hydrodynamic separation device pre-treatment) will not fully meet TGM requirements because it does cause the infiltration of the Stormwater Quality Design Storm (a ¼ inch storm). The dry extended detention basin is intended to allow settlement of particles and provides some infiltration as a by-product. This duplicates the purpose of the hydrodynamic device. Perhaps the designer intended to provide an ‘Infiltration Basin’ instead of a “Dry Extended Detention Basin” but all references to discharge of storms smaller than the SQDV should be eliminated from the document. The DEIR provides insufficient information to determine that the proposed project will not have significant impacts on stormwater quality.

A8-41

On Page 3-92, in the first sentence of the second paragraph, the DEIR states that compliance with the Ventura County TGM would reduce the effective impervious area of the site to no more than 5% of the project area. This statement is only true for storms less than or equal to the Stormwater Quality Design Storm which is somewhere between a 2-year and a 5-year storm. This statement is not true for any storm that exceeds the Stormwater Design Storm including pipe conveyance designs storms of 10-year or 100-year events.

A8-42

The statement on Page 3-92, in the second paragraph, the DEIR states that “off-site discharges would be less than the capacity of anticipated storm drainage piping along Patterson Road” may be true but there is no discussion of the likely capacity, stability or ownership issues associated with the drainage ditch along Teal Club Road and the further downstream drainage system.

A8-43

5.0 - Alternatives

5.3.2- Alternatives Considered and Rejected

The City recommends that an alternative project be considered and analyzed that does not intend to convert prime agriculture land into a non-agriculture use.

Further, the City’s 2030 General Plan Policy SH-9.3., encourages new schools in a manner that is consistent with the CIUP.

The Alternatives Section of the DEIR should also include an alternative that includes the OSD Project site without the TCSP. The DEIR does not provide an understanding of what the relationship is between the Project and the proposed TCSP. However, the DEIR draws a number of conclusions that the TCSP will be approved and annexed into the City. As previously mentioned in this letter, the TCSP is currently being processed and the project must go through the permitting process and decision makers will make independent decisions on the project based on facts and findings. It is not a forgone conclusion that the TCSP will be approved and

A8-44

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eventually annexed to the City. The DEIR should analyze the OSD as a standalone project independent of the TCSP project.

**A8-44
cont.**

Thank you for the opportunity to comment on the DEIR. Please feel free to contact me at (805) 385-8370 if you have questions or you can e-mail at kathleen.mallory@oxnard.org.

Sincerely,


for : Kathleen Mallory, AICP, LEED GA
Planning & Environmental Services Manager

- c. Scott Whitney, Interim City Manager
Ashley Golden, Development Services Director
Isidro Figueroa, Principal Planner
Jay Dobrowalski, Associate Planner

Letter A8	Kathleen Mallory, AICP, LEED GA City of Oxnard Development Services Planning Division
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Response to Comment A8-1:

The commenter provided a general summary of the proposed project, a summary of the Teal Club Specific Plan project in process with the City and a general comment that the EIR did not disclose the relationship between the proposed project and the proposed Teal Club Specific Plan Project.

The Doris Avenue/Patterson Road Educational Facilities Project EIR (Draft EIR) identified the proposed project as a separate project from the Teal Club Specific Plan project.

Page 3-101 of the Draft EIR States:

“A separate proposed project, called the Teal Club Specific Plan, has a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.”

Page 3-103 of the Draft EIR States:

“Separate from the proposed project, the proposed Teal Club Specific Plan would develop land within the City’s SOI adjacent to the project site to the east and south with a variety of urban uses if approved.”

In order to provide additional clarification, the following will be added to Section 2.4 Project Description:

The proposed project is a separate project and not part of the proposed Teal Club Specific Plan Project that includes a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.

Response to Comment A8-2:

The commenter noted that the Draft EIR does not seem to include calculations or other evidence that seem to collaborate that either of the existing 8 and 15-inch diameter sewer pipelines located along Patterson Road has capacity for the additional wastewater generated by the project based on their review of the utility connections section of the project description within the executive summary. The 15" line was installed many years ago to serve the northerly neighborhoods and was found to have insufficient capacity for Oxnard High School when the school was relocated to Gonzales Road. The 8" line was installed to serve the high school and was required by a mitigation measure of the high school EIR to be sized such that it did not promote development. Insufficient information has been provided to determine the potential impacts on the existing wastewater pipes on Patterson Road.

The Draft EIR evaluated impacts to utilities and service systems in Section 3.15 of the Draft EIR and included a copy of the *Doris Avenue/Patterson Road Educational Facilities – Project Water Resources System Analyses (PWRSA)* as Appendix J of the Draft EIR.

As identified in the Wastewater System Capacity Section on pages 4 and 5 of the PWRSA, calculations and other evidence indicating that the existing 8- and 15-inch diameter sewer pipelines located along Patterson Road has capacity for the additional wastewater that would be generated by the project and that the City’s Master Plan shows that there are no capacity issues in the Teal Club Road trunk sewer pipeline or the pipelines located in Patterson Road. A summary of this is provided below.

“It is estimated that the wastewater generated at the Project site will be consistent with the City’s Master Plan estimation for similar uses (schools). Without water meter information for the specific site, it is difficult to calculate the quantity of wastewater to be generated for the Project. However, it is assumed that 50% of the water consumption would be wastewater generation (indoor uses). Different communities vary in actual indoor consumption. This assumption is conservative for planning purposes. Based on the assumption, that translates to half of the projected water demand over the occupied timeframe at the school of 181 days. The wastewater generation would be 928,530 gallons annually (2.85 gallons per student per day). The daily load would equal 5,130 gallons which will occur over an 8 hour period. Finishing the calculation yields a value of 10.7 gallons per minute average flow generated from the Project.

The City’s Master Plan document includes PM 3.3 which outlines the existing collection system infrastructure. Figure 1 of that document shows an existing 8 inch diameter pipeline located in Patterson Road adjacent to the project site. That pipeline is a gravity sewer pipeline and transports flow to the south to Teal Club Road trunk sewer. It is assumed that this pipeline was installed as part of the residential tract to the north as there are no connections to this pipeline on the existing Project site. The City of Oxnard sewer atlas drawings show an existing 15 inch diameter sewer gravity pipeline also located in Patterson Road. This pipeline is parallel to the existing 8 inch diameter pipeline and collects wastewater from a portion of the residential tract and transports the flow to Teal Club Road. Teal Club Road has a 21 inch diameter sewer pipeline that collects flow and transports it to the west where it heads south on Victoria Avenue. There are no wastewater facilities located in Doris Avenue. Figure 3 of Project Memorandum (PM) 3.3 shows that the site is located in Collection Basin 10. The City’s Master Plan shows that there are no capacity issues in the Teal Club Road trunk sewer pipeline or the pipelines located in Patterson Road.”

As noted in Sections 2.4, 3.15, and Appendix J of the Draft EIR, discussion with the City Public Works Department during design will determine if the 8- or 15-inch diameter pipeline is connected to for serving the project site. The addition of the proposed project is assumed to not cause capacity improvements in the existing collection system (Phoenix 2017).

Response to Comment A8-3:

The commenter states that that the Draft EIR addresses powerlines but does not indicate compliance with City Ordinance 2207 which among other things, requires all new developments of 10 acres or more to place all existing overhead facilities along the project’s frontage underground.

The proposed project is at the conceptual design phase and has not undergone the formal design phase. The Draft EIR discloses that utility improvements will be required as part of the proposed project. In order to provide additional clarification, on pages ES-4 and 2-8 of the EIR, under the utility connections heading, the following clarification has been added.

“Utility connections will need to be extended to the site, including water, sewer, gas, electric, data/telecommunications, and recycled water in compliance with existing regulations.”

Response to Comment A8-4:

The commenter stated that the Stormwater Drainage Section of the Project description of the Draft EIR (pg. ES-4), notes that the project will comply with the Ventura County Technical Guidance Manual (TGM) and discusses how the MS4 requirements will be implemented for onsite improvements. The project is noted to include construction of a new public access road along the easterly boundary as well as the widening of Doris Avenue and widening of Patterson Avenue. These 'public' improvements exceed the threshold for requiring implementation of long-term post-construction best management practices in compliance with the Ventura County TGM. There is no discussion of how these impacts will be mitigated and insufficient information to determine the impacts.

The Draft EIR evaluated impacts to utilities and service systems in Section 3.15 of the Draft EIR and included a copy of the Doris Avenue/Patterson Road Educational Facilities – Project Water Resources System Analyses (PWRSA). The Draft EIR and Stormwater Drainage Impact Section of the PWRSA indicates that the project will comply with the Ventura County TGM and makes the following statement regarding proposed stormwater drainage improvements along the new public access road along the easterly project area boundary and associated with the widening of Doris and Patterson Avenues:

“The proposed project shall install curb and gutter improvements along the north and south sides of the parcel. There will be an access road on the east side of the project and that paved road shall have curb and gutter along the west side. These facilities will route non-project site stormwater around the parcel.”

Compliance with the Ventura County TGM (Ventura County 2011) means that the long-term post-construction best management practices required in the Ventura County TGM will be implemented.

The Draft EIR evaluated impacts to local roadways including Patterson Road and Doris Avenue in Section 3.14 of the Draft EIR and in the Traffic Impact Analysis Report (TIAR) for the Doris Patterson Educational Facilities included in Appendix K. Included in the evaluation are Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4, which would reduce the potentially significant impacts during the construction of the proposed project related to transportation and traffic to less than significant. These mitigation measures require the OSD to pay their fair share contribution for improvements as determined by the City’s Traffic Engineering Department based on the project’s trip generation and distribution.

Response to Comment A8-5:

General comments that OSD should coordinate with the City and LAFCo to discuss a proposed General Plan and Pre-Zone Application and the initiation of application for reorganization before LAFCo and the relationship of the proposed OSD project with the Teal Club Specific Plan. The commenter also indicated that the DEIR should indicate what entity would be responsible agency when seeking annexation through LAFCo.

The District met with the City on August 17, 2017 to discuss the proposed Doris Patterson Educational Facilities Project. This discussion included a review of the Ventura LAFCo letter dated June 9, 2017 in response to the Initial Study, how the proposed project relates to the Teal Club Specific Plan, discussion of the conceptual site plan, planning requirements including the General Plan Amendment, Pre-zoning, and Pre-Application with the City.

The City would be the responsible agency when seeking annexation through LAFCo as identified in Section 2.4 Project description and Table 2.5, Discretionary Actions of the Draft EIR.

As identified on page 2-4 of the Draft EIR;

“The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard....The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council’s public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services.”

Response to Comment A8-6:

The commenter would like to know why OSD is seeking annexation into the City of Oxnard considering that the Teal Club Specific Plan Project is only a proposed project.

The Doris Patterson Educational Facilities Project is seeking annexation into the City of Oxnard so that the proposed new schools and administration building would be within the jurisdiction of OSD. The proposed project is not part of the Teal Club Specific Plan project. See Response to Comment A8-1.

Response to Comment A8-7:

Comment A8-7 states that the Draft EIR does not identify the County of Ventura as a responsible agency in case the reorganization is not approved and compliance with county regulatory requirements is needed.

The Doris Avenue Patterson Road Educational Facilities Project Draft EIR evaluated the environmental impacts for the project as proposed, which includes annexation into the City of Oxnard as identified in Section 2.4, Project Description, of the Draft EIR. Anticipated discretionary actions for the proposed project were identified in Table 2-1 of the Draft EIR. In addition to discretionary actions, additional state, regional and/or local government permits may be required to develop the proposed project, whether or not they are explicitly listed in Table 2-2, was acknowledged on page 2-9 of the Draft EIR. The EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components.

Should changes to the project description occur in the future, OSD acknowledges that additional environmental evaluation may be warranted.

Response to Comment A8-8:

Comments were provided that the proposed project is located within the Teal Club Specific Plan project area and does not identify the relationship of the proposed project to the Teal Club Specific Plan Project. The Teal Club Specific Plan Project is required to go through the City's project application processes prior to LAFCo. The Draft EIR seems to draw a conclusion that the Teal Club Specific Plan project will be approved by the City and that annexation will be eventually approved by LAFCo and the EIR does not take that into account in their analysis.

OSD would like to clarify that the proposed project is not part of the "Teal Club Specific Plan Project." The Teal Club Specific Plan Project is a separate project currently being processed by the City that includes the project site with a different development scenario. See Response to Comment A8-1.

The Doris Avenue Patterson Road Educational Facilities Project Draft EIR evaluated the impacts associated with the proposed project and is not dependent on development of the Teal Club Specific Plan Project. The Teal Club Specific Plan project was included in the cumulative impacts analysis in the Draft EIR since it is on the City's project list and could be considered "reasonability foreseeable." The Draft EIR did not include the land use actions required for the Teal Club Specific Plan since it is not part of the proposed project.

Response to Comment A8-9:

The commenter notes that under the Project Description in the Draft EIR it states that an amendment to the City's sphere of influence is required to include the adjoining segment of Patterson Road and agricultural land to the west. However, the Draft EIR does not include details pertaining to the amount of road and agricultural land to the west that is proposed to be included in the SOI Amendment.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard as identified on page 2-4 of the Draft EIR. The Draft EIR evaluated the

proposed project based on the conceptual site plan. As noted in the Draft EIR, anticipated amendments include the amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west. The agricultural land to the west refers to the agricultural land on the project site which is currently west of the City's boundary. As identified on page ES-1 of the Draft EIR, the project site consists of approximately 25 acres. The amount of Patterson Road would be the segment of Patterson Road between Doris Avenue and the southern boundary of the project site.

As noted on Page 3-13 of the Draft EIR:

"The City of Oxnard is a participant in the following two greenbelt agreements, the Oxnard-Camarillo Greenbelt Agreement and the Ventura-Oxnard Greenbelt Agreement (City of Oxnard 2006). Allowable uses within these greenbelt areas are limited to various agricultural and open space uses and other uses that are consistent with adopted general plans. The proposed project site is located outside of either of these greenbelts but is located immediately adjacent to the east boundary of the Ventura-Oxnard Greenbelt. Road and infrastructure improvements within Greenbelt Agreement areas have historically not been considered "development" nor subjected to Greenbelt Agreement policies. Also, the Greenbelt Agreement expressly allows "land uses that are consistent with the general plan". The proposed improvements to adjacent roadways such as Patterson Road, Doris Avenue, and/or Teal Club Avenue are all consistent with the City of Oxnard's adopted general plan and therefore allowed within the Ventura-Oxnard Greenbelt area near the site (Stephens 2017)."

Response to Comment A8-10:

The commenter notes that the Draft EIR correctly identifies portions of Patterson Road and Doris Avenue that are City designated Scenic Routes but does not identify Ventura Road, east of the project site as a Scenic Route. The commenter states that the Draft EIR should include analysis of aesthetic impact from Ventura Road.

OSD revised section 3.1.1.1 of the EIR as follows:

As is discussed in the Initial Study (Appendix A), the proposed project is not located adjacent to a designated State scenic highway or eligible State scenic highway, as identified on the California Scenic Highway Mapping System (Caltrans 2017). The City, in conjunction with Ventura County and the City of Port Hueneme has selected routes for the City's Scenic Highway System (City of Oxnard 2006). These routes include:

- Patterson Road between Fifth Street and Hemlock Street and between Vineyard Avenue and Doris Avenue; and
- Doris Avenue between Victoria Avenue and Patterson Road. ; and
- Ventura Road between U.S. Route 101 and Teakwood Street.

The scenic route portion of Patterson Road is located to the immediate north of the project site. The scenic route portion of Doris Avenue is located to the immediate west of the project site. These routes have scenic values because of their views of the Ventura-Oxnard Greenbelt and in the distance, the Los Padres National Forest mountain range. The scenic route portion of Ventura Road is located approximately 0.5 miles to the east of the project site. Views of the Ventura-Oxnard Greenbelt and the project site are limited and/or blocked by intervening buildings or vegetation.

OSD revised section 3.1.2.3 of the EIR as follows:

The scenic route portions of Patterson Road and Doris Avenue are located to the immediate north and west, respectively, of the project site. The scenic route portion of Ventura Road is located approximately 0.5 miles to the

east of the project site. Views of the Los Padres mountain range, where available, from the scenic route portions of Patterson Road, and Doris Avenue, and Ventura Road would remain unobstructed.

Views of the Ventura-Oxnard Greenbelt would primarily be from travelers on local roadways in the vicinity of the project site including Patterson Road and Doris Avenue. These are short duration viewers. Views of the Ventura-Oxnard Greenbelt from travelers on Ventura Road are limited and/or blocked by intervening buildings or vegetation. Development of the proposed project would occur on the southeast corner of Doris Avenue and Patterson Road. Therefore, travelers' views of the Ventura-Oxnard Greenbelt located to the west would not be impacted on Patterson Road. On Doris Avenue, development of the project may obstruct westbound travelers' views across the site to the Ventura-Oxnard Greenbelt for a short duration in comparison to existing conditions. On Ventura Road, development of the project may obstruct northbound and southbound travelers' views to the west across the site to the Ventura-Oxnard Greenbelt, where not currently obstructed by existing buildings or vegetation, for a short duration in comparison to existing conditions. While this would be a visual change, it would not be a significant impact since the proposed project is located in an area planned for future development in the City of Oxnard General Plan and Doris Avenue westbound travelers and Ventura Road northbound and southbound travelers would be coming from similar developed areas. Eastbound travelers on Doris Avenue would be leaving the Ventura-Oxnard Greenbelt viewing area and traveling toward more developed urban areas in the City of Oxnard. Northbound and southbound travelers on Ventura Road would be traveling through urban areas with brief glimpses of agricultural areas. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views of the Ventura-Oxnard Greenbelt along Doris Avenue and Patterson Road are generally obstructed by an existing wall along the perimeter of the development and street trees along the northern side of Doris Avenue as shown in Figure 3-2. In addition, the proposed project will be designed to be consistent with the community character goals and policies of the City of Oxnard General Plan designed to minimize impacts to scenic resources adjacent to scenic routes. Therefore, the proposed project would have a less than significant impact on these scenic routes, and no mitigation measures are required.

Response to Comment A8-11:

The commenter notes that the Draft EIR correctly identifies portions of Patterson Road and Doris Avenue that are City designated Scenic Routes. The commenter states that the determination of less than significant project impacts to visual character and quality cannot be confirmed without a landscape plan, architectural elevations, and photo simulations.

As described in the City of Oxnard's CEQA Guidelines (City of Oxnard 2017), Chapter 1. Aesthetics and Urban Design, the City's methodology for determining the effect a proposed project would have on scenic resources and whether the effect would be significant involves describing three essential items or components of the visual resource analysis:

- The nature and quality of the visual resource;
- The viewpoint and the identity of the viewers and their sensitivity to changes in the view; and
- The effect of the proposed project in altering the nature of the view.

The City's methodology does not mention the use of and/or state that impacts to scenic resources can only be confirmed with landscape plans, architectural elevations, and photo simulations.

The three essential items or components of the visual resource analysis, as defined in the City's methodology, were described in the Draft EIR, Chapter 3.1 Aesthetics. Also the Draft EIR, Section 2.4, provided sufficient information to describe the proposed heights and foot prints of the proposed school facilities in addition to their location on the project site.

Section 3.1.1.2 identifies the City's goals and policies applicable to aesthetic resources. As stated in the Draft EIR, Section 3.1.2.3, "In addition, the proposed project will be designed to be consistent with the community character goals and policies of the City of Oxnard General Plan designed to minimize impacts to scenic resources adjacent to scenic routes."

Also as stated in the Draft EIR, Section 3.1.2.4, "Through the development of the proposed project and other development contemplated for this area in the City of Oxnard General Plan, the visual character of the project area would increasingly change from agricultural to urban. The City of Oxnard 2030 General Plan Program EIR evaluated the potential environmental impacts of buildout of the 2030 General Plan, including the project area. The 2030 General Plan Program EIR found that while this development would have impacts related to scenic routes, visual character, and light and glare, these impacts would be less than significant and would not require mitigation. As the proposed project is similar to the development contemplated for the project site in the City of Oxnard General Plan, the proposed project's incremental contribution to impacts associated with visual quality would be less than significant."

The Draft EIR includes: the three essential items or components of the visual resource analysis, as defined in the City's methodology; descriptions of the proposed school facilities; identifies the City's goals and policies that will minimize impacts to scenic resources adjacent to scenic routes; and discusses the project's consistency with the City of Oxnard's 2030 General Plan and associated effects on visual quality. This information provides an adequate discussion of the effect of the proposed project would have on scenic resources, and provides sufficient information to determine the less than significant impact the proposed project will have on scenic resources.

Response to Comment A8-12:

The commenter states that a glare analysis and lighting plan must be included to assess the project's impacts on daytime or nighttime views in the area. The commenter also states that utilizing solar panels could pose a threat to aircraft and air tower personnel.

As described in the City of Oxnard's CEQA Guidelines (City of Oxnard 2017), Chapter 1. Aesthetics and Urban Design, the City's methodology for determining the effect a proposed project would have on scenic resources and whether the effect would be significant involves describing three essential items or components of the visual resource analysis:

- The nature and quality of the visual resource;
- The viewpoint and the identity of the viewers and their sensitivity to changes in the view; and
- The effect of the proposed project in altering the nature of the view.

The City's methodology does not mention the use of and/or state that light and glare impacts can only be confirmed with a lighting plan.

The three essential items or components of the visual resource analysis including light and glare impacts, as defined in the City's methodology, were described in the Draft EIR, Chapter 3.1 Aesthetics. A description of the lighting for the proposed project was included in Section 2.4 of the Draft EIR.

Section 3.1.1.2 of the Draft /EIR identifies the City's goals and policies applicable to aesthetic resources including: ER-6.5 Control of Lighting and Glare and ER-9.3 Residential Street Lighting. As stated in the Draft EIR, Section 3.1.2.3, "The proposed project would be constructed with materials and lighting that will be consistent with the lighting principles contained in the Community Design Element of the City of Oxnard General Plan (Oxnard 2011) and the Oxnard Municipal Code (Oxnard 2017), that require that all outdoor lights be designed, located, and arranged so as to reflect the light away from adjoining properties or streets."

Also as stated in the Draft EIR, Section 3.1.2.4, “Through the development of the proposed project and other development contemplated for this area in the City of Oxnard General Plan, the visual character of the project area would increasingly change from agricultural to urban. The City of Oxnard 2030 General Plan Program EIR evaluated the potential environmental impacts of buildout of the 2030 General Plan, including the project area. The 2030 General Plan Program EIR found that while this development would have impacts related to scenic routes, visual character, and light and glare, these impacts would be less than significant and would not require mitigation. As the proposed project is similar to the development contemplated for the project site in the City of Oxnard General Plan, the proposed project’s incremental contribution to impacts associated with visual quality would be would be less than significant.”

The Draft EIR includes the essential items or components of the visual resource analysis, as defined in the City’s methodology, including an analysis of light and glare impacts and descriptions of the proposed school lighting. It also identifies the City’s goals and policies that will minimize impacts associated with light and glare and discusses the project’s consistency with the City of Oxnard’s 2030 General Plan and associated light and glare effects. This information provides an adequate discussion of the effect of the proposed project would have associated with light and glare, and provides sufficient information to determine the less than significant impact the proposed project will associated with light and glare.

The use of solar panels at the project site is not part of the proposed project. Should changes to the project description occur in the future, OSD acknowledges that additional environmental evaluation may be warranted.

Response to Comment A8-13:

The commenter states that the Draft EIR fails to analyze the project in the case that the General Plan Amendment and Pre-zone are not approved by the City or if LAFCo does not approve the annexation, annexation of the project without the Teal Club Specific Plan Project could be in conflict with the LAFCo’s Commissioner Handbook, and that the Draft EIR should identify the relationship between the project and the Teal Club Specific Plan Project.

The Doris Avenue Patterson Road Educational Facilities Project is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City of Oxnard that includes the project site with a different development scenario. See Response to Comments A8-1.

The Draft EIR evaluated the environmental impacts for the project as proposed, which includes annexation into the City of Oxnard as identified in Section 2.4, Project Description. As discussed in Section 2.4, annexation of the project site to the City would require LAFCo approval of several changes of organization, collectively called reorganization. LAFCo approval of the proposed project is not predicated upon the approval and annexation of the Teal Club Specific Plan Project. The EIR will be used by OSD, LAFCo, and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components.

The proposed project is immediately adjacent to a residential neighborhood, one of the areas it would serve. As discussed in Section 3.10 of the Draft EIR, the project would not physically divide an established community. As described in Section 3.13 and Section 15 of the Draft EIR, public services and utilities are currently available to the project site. As the development of the proposed project area was included in the City of Oxnard 2030 General Plan, it would not involve distorted boundaries or territories for the primary purpose of revenue producing.

Should changes to the project description occur in the future, OSD acknowledges that additional environmental evaluation may be warranted.

Response to Comment A8-14:

The commenter states that: the Draft EIR does not analyze the potential operational and economic impact the project might have on surrounding agricultural uses.

The Draft EIR evaluated the impacts the project may have on surrounding agricultural uses, including changes in the existing environment that, due to their location or nature, could result in conversion of farmland to non-agricultural use.

As noted in Section 3.2 of the Draft EIR:

“Indirect impacts could occur with the conversion of the project site from agricultural uses to non-agricultural uses. This type of impact is mainly due to compatibility issues with the adjacent agricultural land still in production (City of Oxnard 2009). Potential compatibility issues may include nuisance effects to a project site from noise, dust, odors, and drift of agricultural chemicals. The adjacent agriculture uses could experience restrictions on the use of agricultural chemicals, complaints regarding noise and dust, and vandalism and pilfering of crops. These conflicts could potentially result in increased costs to the agricultural operation, and encouraged conversion of additional agricultural lands (including Important Farmlands) to urban uses. The City of Oxnard 2030 General Plan contains policies intended to reduce this type of land use incompatibility including policies CD-6.1 and ER-12.11 (providing adequate agricultural buffer areas) and policy ER-12.2 (supporting right-to-farm policies).

The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues. Per the County of Ventura Agriculture/Urban Buffer Policy, a 300-foot setback from adjacent agricultural uses to new structures and sensitive uses is required on the non-agricultural property unless a vegetative screen is installed. With a vegetative screen, the buffer/setback is a minimum of 150 feet. While the County of Ventura Agriculture/Urban Buffer Policy would not apply to project, the District has designed the lay-out of the project in order to minimize compatibility issues with adjacent agricultural uses. Based on input from the Ventura County Agricultural Commissioner, the proposed project was designed to cluster the school facilities within the middle of the northern portion of the site closer to the existing residential neighborhood to the north.” As described further in the Draft EIR, the buffers between the school facilities and the surrounding agricultural uses adhere to the guidelines in the County of Ventura Agriculture/Urban Buffer Policy.

As described in the City of Oxnard’s CEQA Guidelines (City of Oxnard 2017), Chapter 2. Agricultural Resources, the City’s methodology for determining the indirect effects that may lead to conversion of nearby farmlands are described as follows: “Indirect effects that may lead to conversion of nearby farmlands to developed uses are usually caused by land use compatibility issues. Policies from the 2030 General Plan intended to reduce such incompatibility include CD---6.1 and ER---12.11, related to providing adequate agricultural buffer areas, and ER---12.2 that involves supporting right---to---farm policies in Ventura County. Examples of measures that could be used to help minimize the potential for incompatibility with agricultural uses may be found in the County of Ventura Agriculture/Urban Buffer Policy (Ventura County 2006) and in the Ventura County right---to---farm ordinance (Ordinance No. 4151 adopted in 1997).” As noted above, the Draft EIR discusses the proposed project’s compliance with these policies. With the implementation of these policies, as appropriate, compatibility issues associated with location of the project site near agricultural uses (including economic effects) would be less than significant.”

Response to Comments A8-15:

The commenter notes that it is not clear if the analysis included emissions associated with aircraft and/or machinery associated with Oxnard Airport. Additionally, it is unclear if the air quality analysis included emissions/pollutants associated with farming operations. The commenter indicates that activities associated with aircraft, airport, and nearby farming activities should be included in the cumulative analysis since children and staff would be exposed to these pollutants.

The air quality analysis for the proposed project analyzes the project impacts on existing air quality conditions in Ventura County. This would include emissions from all existing land uses including agricultural and airport land uses. As discussed in Section 3.3.2.3 of the Draft EIR, “*Ventura County is in attainment for all federal standards except the 8-hour O₃ standard (U.S. EPA 2017b) and all state standards except O₃ and PM₁₀ standards (CARB 2017).*” Also as discussed in this section, “*The proposed project would result in significant cumulative impacts if it exceeds daily thresholds of significance established by VCAPCD or if it incurred in an increase of emissions beyond what is planned in the City of Oxnard General Plan. Since the proposed project’s long-term emissions are less than established thresholds of significance, and its land use is not anticipated to provide for increase population growth above what is forecasted in the General Plan, the proposed project would not result in a cumulative considerable net increase of any criteria pollutant for which the region is non-attainment. Therefore, the proposed project would have less than significant cumulative impacts.*”

Also as noted in Section 3.3.2.3, “*The location of the project site is not expected to expose students to sources of substantial pollutant concentrations (e.g., industrial facilities emitting odorous or hazardous substances).*”

In addition, Section 3.2 of the Draft EIR evaluated the impacts the project may have in terms of compatibility issues with the adjacent agricultural land still in production. Potential compatibility issues may include nuisance effects to a project site from noise, dust, odors, and drift of agricultural chemicals.

As noted in Section 3.2 of the Draft EIR:

“The City of Oxnard 2030 General Plan contains policies intended to reduce this type of land use incompatibility including policies CD-6.1 and ER-12.11 (providing adequate agricultural buffer areas)..... The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues.... In addition, as appropriate and applicable, the District will follow recommendations in Farming Near Schools, A Community Guide for Protecting Children (Ag Futures Alliance 2002).” As described further in the Draft EIR, the buffers between the school facilities and the surrounding agricultural uses adhere to the guidelines in the County of Ventura Agriculture/Urban Buffer Policy. With the implementation of these policies, as appropriate, to compatibility issues impacts associated with compatibility issues conversion of the project site from agricultural uses to non-agricultural uses would be less than significant.

Additionally, in accordance with the 2016 Annual Report for the Ventura County Air Pollution Control District’s Air Toxics “Hot Spots” Information and Assessment Act of 1987, the only element of the Oxnard Airport listed in the Air Toxics “Hot Spots” Program within Ventura County is the Oxnard Airport Fuel Farm (Facility Number 000560) which is within a group of Facilities that have been determined to have a less than significant risk. The Hot Spots Program’s purpose is to notify the public of facilities that have routine and predictable emissions of toxic air pollutants that may pose a significant health risk to nearby residents and workers. Therefore, there is no evidence to support adverse impacts to sensitive receptors at the Proposed Project resulting from operation of the Oxnard Airport.

Response to Comments A8-16:

The commenter states that an additional measure should be added that requires OSD to provide a letter containing the APCD compliant telephone number to all property owners within the surrounding established neighborhoods and OSD student (guardians) to report odor complaints. The commenter also recommended that this contact information be posted on a sign(s) affixed to the outside of the project site to ensure this contact information is readily available to persons frequenting the school site.

Section 3.3 of the Draft EIR evaluated the proposed project's potential to create objectionable odors affecting a substantial number of people.

As identified on page 3-17 of the Draft EIR:

“While the project would be adjacent to agricultural fields, the types of crops grown at these field are not anticipated to create objectionable odors in accordance with the listing for odorous land uses prescribed in the Ventura County Air Quality Guidelines. Emissions from construction equipment are not listed as odorous sources. Thus, the proposed project would not result in objectionable odors affecting a substantial number of people and project impact would be less than significant.”

In addition, Section 3.2 of the Draft EIR evaluated the impacts the project may have in terms of compatibility issues with the adjacent agricultural land still in production. Potential compatibility issues may include nuisance effects to a project site from noise, dust, odors, and drift of agricultural chemicals.

As identified on page 3-17 of the Draft EIR:

“The City of Oxnard 2030 General Plan contains policies intended to reduce this type of land use incompatibility including policies CD-6.1 and ER-12.11 (providing adequate agricultural buffer areas)..... The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues.... In addition, as appropriate and applicable, the District will follow recommendations in Farming Near Schools, A Community Guide for Protecting Children (Ag Futures Alliance 2002).” As described further in the Draft EIR, the buffers between the school facilities and the surrounding agricultural uses adhere to the guidelines in the County of Ventura Agriculture/Urban Buffer Policy. With the implementation of these policies, as appropriate, to compatibility issues impacts associated with compatibility issues conversion of the project site from agricultural uses to non-agricultural uses would be less than significant.

Response to Comments A8-17:

The commenter notes that the proposed project is not consistent with the Airport Land Use Plan for Ventura County and the proposed project is not an acceptable use within the Traffic Pattern Zone. The commenter notes that if OSD moves forward at this location, the District should anticipate concerns regarding land use, airport compatibility, safety, and traffic will be of vital concern to decision makers and residents when OSD seeks approval of a General Plan Amendment and Pre-zone, as well as annexation. The City's General Plan Goal SH-9 and Policies SG-9, SH 9.1, SH 9.2 were identified. The commenter also states that the Draft EIR did not include flight and/or operational incident information associated with the Oxnard Airport. The EIR should include incident reports to determine the frequency of incidents associated with the Oxnard Airport and the associated hazard/risk assessment.

OSD is aware that schools, under the subcategory of Public/Institutional land uses, are classified as “Unacceptable” within the TPZ in the Airport Land Use Plan for Ventura County. As noted on page 3-99 of the EIR:

“As required by Public Utilities Code Section 21675, the proposed project would be submitted to the ALUC for review. If the commission determines that the proposed project is inconsistent with the CLUP, OSD would be notified. OSD after a public hearing, can propose to overrule the commission by a two-thirds vote if it makes specific findings that the proposed project is consistent with the purpose of this article. Therefore, in order to be constructed, the proposed project would require either a finding of consistency by the ALUC with the CLUP or OSD would need to overrule the commission by a two-thirds vote with applicable findings.”

Potential impacts associated with aircraft hazards were addressed in Section 3.8 of the Draft EIR and Appendix I includes a copy of the Aircraft Hazard and Land Use Risk Assessment for the proposed project.

The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. This summary notes that "There have been six significant accidents involving approaches or departures of aircraft inside the Oxnard Airport SOI and three outside the SOI, but nearby, since 1979." The AHLRA, prepared by Heliplanners, includes on page 4, a table listing historical operations counts, and pages 9-11 detail historical significant accidents surrounding Oxnard Airport. As stated in the AHLRA: "For a historical perspective of safety at Oxnard Airport, we have reviewed its accident history. Airports sometimes experience on-airport incidents, such as hard landings, gear-up landings, taxiing accidents, etc. While these may damage aircraft or injure occupants, they do not affect off-airport land uses and are not considered significant in the context of this study. Consequently, we have not attempted to identify or record such incidents in this report."

The Draft EIR, Section 3.8.2.3, includes a discussion of accident risk at the project site: "...*estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years.*" Appendix I includes calculations of accident risk for both the project site and within sphere of influence on pages 10 - 12 of the technical report (Appendix I). The calculations show an accident is likely to happen within the airport SOI on an average of once every 4.2 years. However, the project site comprises a small amount of the overall area included within the SOI. All potential accidents would not be expected to occur in one place within the SOI.

Response to Comments A8-18:

The commenter recommends that an additional mitigation measure be incorporated detailing a student and staff disaster plan that shall be available to all employees and student (guardians) in case of a "worst case" scenario.

Section 3.8 of the Draft EIR identified project impact from airport hazards to be significant and unavoidable in order to account for a "worst-case scenario." The identified mitigation measure would allow for better response planning should an aircraft hazard occur but it would not lessen the probability of an occurrence. OSD is willing to add this measure but project impact from airport hazard would remain significant and unavoidable.

OSD made the following revisions to pages 3-77 and 4-3 of the Draft EIR.

"The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the "worst-case scenario" project impact from airport hazards would therefore be considered potentially significant and unavoidable. Mitigation Measure HAZ-6 and HAZ-7 have been identified to require a site disaster plan and public notification that the project site is within the Traffic Patterson Zone respectively. Nonetheless, project impact remains significant and unavoidable with mitigation incorporated."

OSD made the following revisions to page 3-78 Draft EIR.

"3.8.2.5 Mitigation Measures

HAZ-1: *Project development plans shall take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. Land within this area shall be considered for low average occupancy level uses, such as parking lots, or designated as landscaped "buffer" areas.*

HAZ-2: All emergency plan(s) that are prepared for the educational facilities shall identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident.

HAZ-3: An LUC shall be prepared, approved by DTSC, recorded with the County of Ventura Recorder's Office and implemented in accordance with DTSC requirements. This LUC will insure that the project site's future use is restricted to non-residential purposes.

HAZ-4: During grading and project construction activities the DTSC approved SMP shall be implemented to the satisfaction of DTSC.

HAZ-5: Prior to completion of final design, plans shall be submitted to the FAA for an obstruction evaluation to determine if buildings and other elements (including construction activities) would penetrate the FAR Part 77-specified "notice surface".

HAZ-6: OSD shall prepare a site disaster plan that accounts for a potential aircraft accident scenario. The plan shall be available to all employees and student (guardians).

HAZ-7: OSD shall provide notification on an annual basis to all employees and student (guardians) that the project site is located within the Traffic Pattern Zone of Oxnard Airport.

3.8.2.6 Level of Impact After Mitigation

Implementation of mitigation measures identified above would reduce potentially significant impacts related to hazards and hazardous materials to a less than significant level for all topics except for airport hazards. In order to account for the "worst-case scenario" project impact from airport hazards would be considered potentially significant and unavoidable with mitigation incorporated."

Response to Comments A8-19:

The commenter reaffirms that the current 2030 General Plan land use designations for the site does not permit the development of a school and that a General Plan Amendment and Pre-zone will be required along with an Annexation request to LAFCo. The City is currently processing the Teal Club Specific Plan Project that the proposed project is located in and it is not clear how both of these proposals relate to each other. Please clarify the relationship of the proposed project to the Teal Club Specific Plan.

The Draft EIR identified the proposed project as a separate project from the Teal Club Specific Plan project.

Page 3-101 of the Draft EIR States:

"A separate proposed project, called the Teal Club Specific Plan, has a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses."

Page 3-103 of the Draft EIR States:

“Separate from the proposed project, the proposed Teal Club Specific Plan would develop land within the City’s SOI adjacent to the project site to the east and south with a variety of urban uses if approved.”

In order to provide additional clarification, the following will be added to Section 2.4 Project Description:

The proposed project is a separate project and not part of the proposed Teal Club Specific Plan Project that includes a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.

Response to Comments A8-20:

The commenter states that the LAFCo comment letter in response to the Notice of Preparation indicated that territory to the west of the proposed project which is intended to be used for widening of Patterson Road appeared to be located outside the City’s CURB and voter approval seemed to be required for the extension of City services outside of the designated City’s Curb. The LAFCo NOP response letter also mentioned the same portion of land was within the Ventura-Oxnard Greenbelt and that LAFCo policies generally provide that LAFCo will not approve projects in conflict with the Greenbelt. The commenter noted that LAFCo asked for both of these items to be addressed in the EIR and the Draft EIR does not appear to indicate whether the territory in question is location in the City’s CURB and Ventura-Oxnard Greenbelt. The EIR does not provide specifics regarding the amount of road territory that will be annexed as part of the subject project and should be addressed in the EIR.

Regarding the amount of road territory that will be annexed as part of the subject project, see Response to Comment A8-9.

The Draft EIR evaluated agricultural impacts in Section 3.2. As noted on page 3-13 of the Draft EIR:

“The City of Oxnard is a participant in the following two greenbelt agreements, the Oxnard-Camarillo Greenbelt Agreement and the Ventura-Oxnard Greenbelt Agreement (City of Oxnard 2006). Allowable uses within these greenbelt areas are limited to various agricultural and open space uses and other uses that are consistent with adopted general plans. The proposed project site is located outside of either of these greenbelts but is located immediately adjacent to the east boundary of the Ventura-Oxnard Greenbelt. Road and infrastructure improvements within Greenbelt Agreement areas have historically not been considered “development” nor subjected to Greenbelt Agreement policies. Also, the Greenbelt Agreement expressly allows “land uses that are consistent with the general plan”. The proposed improvements to adjacent roadways such as Patterson Road, Doris Avenue, and/or Teal Club Avenue are all consistent with the City of Oxnard’s adopted general plan and therefore allowed within the Ventura-Oxnard Greenbelt area near the site (Stephens 2017).”

Response to comments A8-21:

The commenter indicates the EIR does not identify the relationship between the proposed project and the Teal Club Specific Plan. However, the EIR draws conclusions which include that the Teal Club Specific Plan will be annexed into the City. The Teal Club Specific Plan is currently being processed by the City and project decisions regarding Teal Club Specific Plan would depend on the City’s decision makers. The Draft EIR should include analysis without the Teal Club Specific Plan. If the project seeks annexation independently, it may conflict with LAFCo’s Commissioner’s Handbook Section 3.3.2.2.

The Doris Avenue Patterson Road Educational Facilities Project is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City of Oxnard that includes the project site with a different development scenario.

The Doris Avenue Patterson Road Educational Facilities Project Draft EIR evaluated the impacts associated with the proposed project and is not dependent on development of the Teal Club Specific Plan Project. The Teal Club Specific Plan project was included in the cumulative impacts analysis in the Draft EIR since it is on the City's project list and could be considered "reasonably foreseeable." The Draft EIR did not include the land use actions required for the Teal Club Specific Plan since it is not part of the proposed project.

3.3.2.2. of the LAFCo's Commissioner's Handbook Section indicates LAFCo discourages applications with boundaries that:

- a) Split neighborhoods or divide an existing identifiable community, commercial district, or other area having a social and economic identity;
- b) Create area where it is difficult to provide services;
- c) Create boundaries which result in islands, peninsulas, flags, 'pinpoint contiguity,' "cherry stems," or cause, or further, the distortion of existing boundaries; and
- d) Are drawn for the primary purpose of encompassing revenue-producing territories.

As noted on page 3-102 of the Draft EIR, the proposed project would not cause distortion of existing boundaries. The proposed project is located within the City of Oxnard SOI and development of the area with urban uses was accounted for in the City's 2030 General Plan. The proposed project would be developed in an area adjacent to an existing residential neighborhood and includes public schools to serve students within the OSD.

Response to Comments A8-22:

The commenter notes that the Draft EIR states that the proposed project is situated just outside of the 60 dBA Community Noise Equivalent Level contour but it should be noted that development will experience overflight of aircraft with single event noise exceeding 65 dBA routinely.

The standard metric for airport noise is CNEL (Community Noise Equivalent Level), which is a single noise level averaged for a 24 hour period. This metric would take into account the single event noise the commenter describes. While the noise levels may rise higher during an event closer to the site, the standard is based on the average of all the events during a single day. As noted in the comment and in the Draft EIR, the project site lies outside the 60 dB noise contour around Oxnard Airport, and would therefore be exempt from the noise compatibility standards given in the CLUP. In addition, the project will be designed to meet both the City of Oxnard's and State of California interior noise level standard of 45 dBA CNEL. Noise levels from single event aircrafts may exceed the 60 dBA Leq at times throughout the day, but the project will achieve a 45 dBA CNEL for all interior classrooms.

Response to Comments A8-23:

For the Oxnard Fire Department the commenter indicates that further evaluation of the project is needed in greater detail to provide a concrete analysis and requests that Sergio Martinez with the Oxnard Fire Department be contacted.

The Draft EIR evaluated impacts to fire protection services in Section 3.13 of the Draft EIR. Based on an interview with Assistant Chief Alex Hamilton, Station 1 and Station 4 would provide emergency and non-emergency services to the project site. As noted on page 3-116 of the Draft EIR:

"The proposed project includes reorganization that would include annexation into the City of Oxnard and detachment from the Ventura County Fire Protection District. Oxnard Fire Department provides fire protection to the City. The proposed project would be designed and constructed to meet required fire standards that would

include adequate emergency vehicle access. Construction would comply with the Occupational Safety and Health Administration (OSHA) and Fire and Building Codes.

Operation of the school facility is anticipated to generate a typical range of service calls including fire suppression, emergency medical, and emergency rescue requests for service. Fire Station 1 located at 491 South "K" Street is within 1.7 miles and Fire Station 4 located at 230 West Vineyard Avenue within 3.2 miles of the project area are close enough to provide fire protection services in within a reasonable response time. The Oxnard Fire Department has provided an estimate that the response time from Fire Station 1 to the corner of Doric Avenue and Patterson Road is approximately 2 minutes, 27 seconds. The response from Fire Station 4 to the corner of Doric Avenue and Patterson Road is approximately 4 minutes 22 seconds (Oxnard Fire Department 2017). Therefore, with compliance with existing regulations, project impact on fire protection services would be less than significant."

The commenter did not provide details about what additional information they feel is needed in the EIR nor did they identify any specific deficiencies in the environmental analysis provided in the Draft EIR.

Response to Comments A8-24:

The commenter states that the site plans included in the Draft EIR and associated studies seem to be inconsistent with each other and requests a site plan inclusive of all off-site improvements that represents the proposed project.

The Draft EIR evaluated the proposed project based on the conceptual site plan included as Figure 2-2 in the Draft EIR. The conceptual site plan and the project description included in the Draft EIR provides sufficient detail for evaluation and review of environmental impacts, per CEQA Guidelines Section 15124.

Response to Comment A8-25:

Comment A8-25 states that the OPD identified ten driveway/pedestrian conflict sites on Figure 2-2 and provided six mitigation measures to address them.

As discussed in the Draft EIR, Section 3.14.2.3, "The proposed project would be designed and constructed to meet required standards....Per the TIAR (Appendix K), there would be no increase in hazards due to a design feature or incompatible uses."

Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. These may, as appropriate, include the recommendations in the comment. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department.

OSD revised section 2.4 of the EIR as follows: *An additional drop-off area for the playfield area is provides along Patterson Road. Security fencing will be provided around the project site. A conceptual site plan is shown in Figure 2-2.*

A two-story 24,868 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. A minimum of three parking stalls will be signed and striped near the offices for the proposed elementary and middle schools for "Visitor Use Only".

Response to Comments A8-26 and A8-36:

In Comment A8-26 the commenter states "Based on the analysis and studies provided on the DEIR, staff is unable to make a determination of the level of significance of potential impacts the Project might be pertaining to water and waste water. Please coordinate with the City's Public Works Department to determine the appropriate studies that are required to be submitted to make a determination of significance."

In Comment A8-36, the commenter states that The Draft EIR and Project discussion do not provide sufficient information to determine all potential impacts of the project. The current project as described does not comply with City standards, ordinances, and policies. Project components such as distance between driveways, construction of full improvements (including utilities) along the project frontage, placement of overhead utilities underground and conveyance of stormwater to a safe point of discharge are some of the components that are unclear, or that are clearly not mitigated. We request that a meeting be scheduled with City staff to discuss the proposed project in greater detail and clarify the scope of the improvements proposed as a part of the project.

Tetra Tech and Sites Pacific met with representatives of the City of Oxnard on February 26, 2018, and discuss the issues raised in the Cities comment letter dated January 17, 2018, including Comments A8-26 and A8-36. Please refer to the responses to Comments A8-2, A8-4, A8-25, A8-34, A8-35, A8-37, A8-38, A8-39, A8-40, A8-41, A8-42, and A8-43 to address Comments A8-26 and A8-36.

Response to Comment A8-27:

The commenter noted that the traffic study included in the Draft EIR doesn't meet the minimum requirements of City Council Resolution 10,418 regarding the preparation and submittal of traffic studies. A revised traffic study must conform to City requirements.

The Traffic Impact Analysis Report (TIAR) (Appendix K of Draft EIR) was prepared by Kunzman Associates, Inc. (Kunzman). Kunzman has provided over 40 years of excellent service and they have prepared traffic studies for several K-12 School Districts in California. They have successfully completed previous traffic studies with the City of Oxnard. The Traffic Impact Analysis Report (TIAR) (Appendix K of Draft EIR) for the proposed project does meet the minimum requirements of City Council Resolution 10,418 regarding the preparation and submittal of traffic studies.

The TIAR was completed with the following four analysis scenarios:

- Existing Traffic Conditions

As noted in Section IV.C on page 14 of the TIAR, existing intersection turning movement counts at the study intersections were obtained in October 2017.

- Existing Plus Project Traffic Conditions

The existing plus project traffic conditions (see Section VI on page 37 of the TIAR) has been analyzed to comply with the Sunnyvale West Neighborhood Association v. City of Sunnyvale CEQA court case. This scenario assumes the full development of the proposed project and full absorption of the proposed project trips on the circulation system at the present time.

- Opening Year (2020) Traffic Conditions

Section VII.A on page 43 of the TIAR was based on The Teal Club Specific Plan - EIR Traffic Impact Study (TIS) prepared by Stantec (May 2015). It should be noted that the project site is located within the Teal Club Specific Plan as identified on the City's Zoning Map. However, the proposed project is not part of the Teal Club Specific Plan project that is currently being processed by the City. To provide a conservative analysis, the proposed project was manually added to the previous traffic volume forecasts from the May 2015 TIS. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the Oxnard Traffic Model (OTM). It should be noted that the OTM includes cumulative development (pending and approved) throughout the City of Oxnard.

- Interim Year (2021) Traffic Conditions

The Interim Year (2021) traffic volumes (see Section VIII.A on page 52 of the TIAR) were obtained from The Teal Club Specific Plan - EIR TIS prepared by Stantec (May 2015). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been “conservatively” added to the traffic volume forecasts. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM. It should be noted that the OTM includes cumulative development (pending and approved) throughout the City of Oxnard.

Response to Comment A8-28:

The commenter noted that the Draft EIR doesn't seem to analyze the Project's impacts on the following four intersections:

- Gonzales Road and Ventura Road;
- Doris Avenue and Ventura Road;
- Ventura Road and Teal Club/Second Street; and
- Ventura Road and Fifth Street.

The following five OSD schools are currently located in the vicinity of Ventura Road:

- Bernice Curren Elementary School – 1101 North F Street;
- Emilie Ritcher Elementary School – 2200 Cabrillo Way;
- Driffill Elementary School – 910 South E Street;
- Freemont Middle School – 1130 North M Street; and
- Haydock Middle School – 647 West Hill Street.

These five existing elementary/middle schools currently accommodate the OSD students in the vicinity of Ventura Road as shown in the current OSD attendance boundary maps for these five schools. Although some inter-district student transfers may occur between the proposed schools and existing schools, the majority of the students will travel from residential areas located west of Ventura Road. As shown on page 3-120 of the Draft EIR in Table 3-25, 17 intersections were identified and investigated as potentially impacted by the proposed project. These 17 intersections were selected because they were within a preliminary OSD attendance boundary for the proposed schools and they are all located west of Ventura Road. Although the four intersections on Ventura Road are located within the current OSD attendance boundary maps for the five existing/middle schools, they were not selected because they are located outside of the preliminary OSD attendance boundary for the proposed schools. Therefore, it was determined that the proposed project will not significantly impact these four intersections along Ventura Road.

Response to Comment A8-29:

The commenter noted that pages ES-4 and ES-50 of the Draft EIR, Mitigation Measures TRAF-1 through TRAF-4 state that the mitigations will be satisfied by the payment of a fair share contribution to the City. City Ordinance 10,453 dictates that the City Public Works Director has the option of accepting payment or requiring construction of the improvements. All of these mitigation measures must be altered to comply with the City Ordinance allowing the Director to require construction by the Applicant/OSD. The description of the extent of the improvements required by each mitigation measure isn't clear in the mitigation measure wording.

Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department. In addition, OSD will comply with all City ordinances when designing and constructing this project.

Response to Comment A8-30:

The commenter noted that on Page ES-4 of the Draft EIR, the Transportation/Circulation section indicates that the project description includes construction and sidewalk improvements along the property but doesn't provide any indication of the anticipated roadway improvements. Figure 7 of the traffic study illustrates roadway cross sections. However, the dimensions on these cross-sections aren't accurate and must be revised to show travel way widths measured from median curb to gutter curb.

Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department. In addition, OSD will comply with all City ordinances when designing and constructing this project.

Response to Comment A8-31:

The commenter noted that the Draft EIR indicates that the project will add significantly to the daily trips on Teal Club Road and Doris Avenue. The current configurations of the portions of these roads between Ventura Road and Victoria Avenue include existing drainage ditches directly adjoining the roadway. The Draft EIR should evaluate the impacts of these additional trips on the safety of the current design.

As discussed in the Draft EIR, Section 3.14.2.3, "The proposed project would be designed and constructed to meet required standards....Per the TIAR (Appendix K), there would be no increase in hazards due to a design feature or incompatible uses."

Response to Comment A8-32:

The commenter noted on page ES-49 Section 3.14 under mitigation measure TRAF-3 that the Draft EIR indicates an impact to Patterson Road and requires mitigation to widening of this roadway. The impacts to Doris Road are very similar and there needs to be a similar mitigation measure for the widening of Doris Avenue.

Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department. In addition, OSD will comply with all City ordinances when designing and constructing this project.

Response to Comment A8-33:

The commenter noted that the Draft EIR is inconsistent regarding the extent and location of any public or private streets along the eastern and southern boundary of the project. The Draft EIR also doesn't provide any discussion of the location of any proposed median breaks or turn-pockets.

Project site circulation is described in Section 2.4. Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department. In addition, OSD will comply with all City ordinances when designing and constructing this project.

Response to Comment A8-34:

The commenter noted that the proposed multiple consecutive curb cuts (driveway openings) along Doris Avenue between Buildings 10 and 13 don't appear to comply with the City of Oxnard Zoning Ordinance on curb cut spacing. Compliance with the City ordinance regarding driveway spacing could significantly affect the project layout.

The proposed site plan shown in Figure 2-2 on page 2-6 of the Draft EIR is conceptual. The final site plan will conform to the City of Oxnard curb cut spacing criteria.

Response to Comment A8-35:

The commenter noted that the Draft EIR doesn't adequately analyze the pedestrian and vehicular conflicts along the Doris Avenue frontage of the Site. Based on the traffic study, almost 1,000 morning peak hour trips are forecasted to be generated by the project. If vehicular access to the site is from Doris Avenue, potential queuing problems may occur during that time period. Separating the vehicular access from the pedestrian access to the school site will address the safety and queuing concern.

The project trip generation is shown in Table 2 on page 28 of the TIAR (Appendix K of Draft EIR). The proposed school trip generation is "conservative" because it does not account for students that are dropped off by the same family vehicle and attend both the elementary and middle schools.

Furthermore, the current bell schedule obtained from the OSD website is as follows:

- 8:00 AM 6th Grade to 8th Grade Start Bell;
- 8:20 AM Kindergarten to 5th Grade Start Bell;
- 1:37 PM Kindergarten Dismissal Bell;
- 2:30 PM 1st Grade to – 5th Grade Dismissal Bell; and
- 2:28 PM 6th Grade to – 8th Grade Dismissal Bell.

It is recommended that OSD offset the bell schedules for the proposed elementary school and the proposed middle school. This shall substantially reduce the potential queuing problems that occur at typical schools for the 30 minute period around the school start bell and the school dismissal bell periods. It should also be noted that the school dismissal bell typically occurs outside the adjacent street commuter evening peak period from 4:00 PM to 6:00 PM.

Response to Comment A8-36: See above with Response to Comment A8-26.**Response to Comment A8-37:**

The commenter stated that on pages ES-60 and 3-140, the Draft EIR states that the City anticipates expansion of the plant to 39.7 million gallons per day (mgd) by 2020. There are no current plans for an expansion within the timelines mentioned in this paragraph. This statement appears to reference documents from 2007 that are out of date. The current capacity is 31.7 mgd.

The statements on pages ES-60 and 3-140 in the Draft EIR indicating that the City anticipates expansion of the (waste water treatment) plant to 39.7 mgd by 2020 will be deleted from the Final EIR.

Response to Comment A8-38:

The commenter stated that on page 3-135, in the second paragraph, the DEIR indicates that two sewer trunks (Redwood and Western) provide sewer service to the project area. Connection to the existing wastewater lines in Patterson Road as proposed in the DEIR would convey wastewater west in Teal Club to the Western Trunk in Victoria Avenue. Connection to the mentioned Redwood Trunk line would most likely require the construction of a wastewater lift station. This paragraph further states that "the Western Trunk Sewer is currently operating near design capacity" and references a Kennedy/Jenks Consultants study from 2007. If this line was "near design capacity" in 2007 a new or updated study is required to address all projects that have connected to that line in the intervening 11 years and all projects that have been approved to connect but have not yet starting contributing flows. The DEIR provides insufficient information to determine the potential impacts on the existing downstream wastewater system.

The Draft EIR evaluated impacts to utilities and service systems in Section 3.15 and included a copy of the *Doris Avenue/Patterson Road Educational Facilities – Project Water Resources System Analyses (PWRSA)* as part of Appendix J of the Draft EIR.

The Wastewater System Capacity Section on pages 4 and 5 of the PWRSA stated that:

“It is estimated that the wastewater generated at the Project site will be consistent with the City’s Master Plan estimation for similar uses (schools). Without water meter information for the specific site, it is difficult to calculate the quantity of wastewater to be generated for the Project. However, it is assumed that 50% of the water consumption would be wastewater generation (indoor uses). Different communities vary in actual indoor consumption. This assumption is conservative for planning purposes. Based on the assumption, that translates to half of the projected water demand over the occupied timeframe at the school of 181 days. The wastewater generation would be 928,530 gallons annually (2.85 gallons per student per day). The daily load would equal 5,130 gallons which will occur over an 8 hour period. Finishing the calculation yields a value of 10.7 gallons per minute average flow generated from the Project.”

Although the Kennedy/Jenks Consultants study from 2007 stated that the Western Trunk Sewer is currently operating “near design capacity, it also indicated that the Western Trunk Sewer could receive up to 50 percent of the estimated peak wastewater flow from the proposed Teal Club Specific Plan project (227,255 gallons per day [gpd] or 192.5 gallons per minute [gpm]) without exceeding its design capacity. As stated above, the estimated total wastewater generation from the proposed school project equals 5,130 gpd or 10.7 gpm, which is substantially less than estimated peak wastewater flow from the proposed Teal Club Specific Plan project. Therefore, the Western Trunk Sewer has the capacity to receive the anticipated wastewater flow from the proposed school project.

Response to Comments A8-39 and A8-43:

In Comment A8-39 the commenter summarizes statements within the Executive Summary (page ES-40 and ES-56) related to the construction of downstream facilities within Patterson Road that are compatible with the City of Oxnard’s Master Plan of Drainage. The commenter states the Draft EIR does not indicate whether the project will include construction of any new improvements further downstream, and that Patterson Road storm drain improvements will be discharged to the existing Teal Club Road facility. Lastly, the commenter states there is no analysis or discussion of the capacity and stability of the existing ditch along Teal Club to convey additional stormwater, nor is there any information in the Draft EIR addressing ownership of the ditch and its associated maintenance.

In Comment A8-43, the commenter states that on Page 3-92, in the second paragraph, the Draft EIR states that “off-site discharges would be less than the capacity of anticipated storm drainage piping along Patterson Road” may be true but there is no discussion of the likely capacity, stability or ownership issues associated with the drainage ditch along Teal Club Road and the further downstream drainage system.

The Draft EIR evaluated Hydrology and Water Quality in Section 3.9. The Draft EIR on pages ES-40, ES-56, and 3-92, and the Stormwater Drainage Impact Section of the PWRSA (Phoenix 2017) that is included in Appendix J of the Draft EIR, indicate the proposed project anticipates the need for “new 30- and 36-inch diameter storm drainage piping infrastructure along Patterson Road from the Site to the existing Teal Club Road facility as documented in the City of Oxnard Drainage System Master Plan.”

The Draft EIR on Pages ES-40 and 3-92, and the Stormwater Drainage Impact Section of the PWRSA (Phoenix 2017), address concerns pertaining to capacity of the anticipated storm drainage piping. Specifically, these sections indicate that any discharge from BMPs designed to comply with the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, Manual Update 2011, could be released to the concrete pipe system recommended in the 2003 Master Plan of Drainage. Additionally, the Conclusion section of the PWRSA (Phoenix 2017) notes the 2003 City Master Plan of Drainage (City of Oxnard) “anticipated development of the open space in

the area of the Project,” that it identified the “necessary storm drain infrastructure needed to serve the area,” and that these infrastructures were identified “prior to the implementation of the Municipal Separate Stormwater Sewer System requirements [that] further restricted developments from direct discharge of stormwater without detention or retention onsite.”

In order to provide additional clarification addressing the commenter’s questions on the capacity, stability ownership, and maintenance of the Teal Club drainage ditch following revision will be made to the EIR in the ES and Section 3.9:

“Review of information available at the Ventura County Assessors website indicates that the Teal Club drainage ditch is located in an unincorporated area Ventura County along Teal Club Road straddling the boundary between the public right-of-way and privately owned properties to north of Teal Club Road. Based on a reconnaissance performed by Tetra Tech on February 26, 2018 and review of the image in Google Earth dating from April 20, 2018, the ditch an unlined v-shaped structure approximately 3 feet deep and 6 feet wide that drains the properties bound by Ventura Road on the east and between Doris Avenue on the north and Teal Club Road on the south. Assessor’s Parcel Maps available at the Ventura County Assessors website indicate that the Teal Club drainage ditch serves an area of approximately 341 acres in the area between Ventura Road and Victoria Avenue that includes the project site. Review of the Google Earth images of the ditch dating from 2006 to 2016 and the physical appearance of the ditch noted by Tetra Tech during the February 26, 2018 reconnaissance indicates that the Teal Club drainage ditch has been well maintained, is not structurally damaged from excessive stormwater drainage, and appears have a carrying capacity capable of accommodating the drainage area between Ventura Road and Victoria Avenue that includes the project site. Based on its location, it is likely that the Teal Club drainage ditch is owned and maintained either by the County of Ventura or the owners properties to north of Teal Club Road.”

Response to Comment A8-40:

The commenter stated that on Page ES-56, the Draft EIR indicates that MS4 post-construction BMPs are required and that they will incorporate compliance with the Ventura County TGM in the project design. The Draft EIR further states that “Onsite hydrodynamic treatment systems will treat the stormwater prior to discharge to the offsite system.” The current TGM requires the project to infiltrate the Stormwater Quality Design Storm and does not allow for its discharge offsite unless ‘technical infeasibility’ is proven for the site. The Draft EIR does not provide any discussion of technical infeasibility regarding providing the required onsite infiltration. There is no discussion of testing for onsite infiltration rates that will be sufficient to meet MS4 permit requirements.

The Draft EIR evaluated Hydrology and Water Quality in Section 3.9. As identified in the Draft EIR, MS4 post-construction BMPs are required and the proposed project will incorporate compliance with the Ventura County TGM in the project design. In order to provide additional clarification the following revision will be made to the EIR in the ES and Section 3.9:

“The Ventura County TGM indicates that soils in Ventura County were grouped into seven hydrologically homogeneous families based on the Soil Survey, Ventura Area, California (U.S. Department of Agriculture, Soil Conservation Service 1970) (Soil Survey). Soils Note that the Soil Conservation Service is now identified as the Natural Resource Conservation Service (NRCS). The NRSC Soil Survey classifies soils in Ventura County into Hydrologic Groups A, B, C, and D, with two soil families each assigned Hydrologic Groups A, B, C, and one to Hydrologic Group D. The NRSC Soil Survey indicates soils at the project site are mapped as Ventura Hydrology Manual No. 3 soils, Camarillo loam (Cd) of Hydrologic Group C with an estimated permeability of 0.63 to 2.0 inches per hour.

In order for meet MS4 requirements, the Ventura County TGM states that locations like the project site where soils are mapped as Ventura Hydrology Manual No. 3, or where site specific analysis indicate infiltration rates of 0.3 to 0.5 inches per hour, and no other infiltration-related infeasibility criteria apply, shall use a Bioinfiltration BMP (or Rainwater Harvesting). Bioinfiltration is an adaption of the Bioretention with an Underdrain BMP in which the

underdrain is raised above the gravel storage layer in order to promote infiltration but allow release of biotreated runoff to the storm drain when infiltration capacity is reached.

No onsite soil percolation testing has been performed to evaluate the onsite infiltration rates. Therefore, Bioinfiltration BMP (or Rainwater Harvesting) Infiltration Basins will be implemented at the project site to treat infiltrated stormwater onsite prior to release to the storm drain when infiltration capacity is reached. If subsequent onsite soil percolation testing indicates that the project site soils have infiltration rates of 0.5 inches per hour or greater, infiltration-based BMPs will be considered for the project site in accordance with the Ventura County TGM and MS4 requirements.”

These clarifications do not change the finding in Section 3.9 of the EIR that with compliance with existing regulations including implementation of stormwater BMPs that target pollutants of concern in runoff from the project site, implementation of Mitigation Measure HYDRO-1, and connection to the OWTP, the potential for violation of water quality standards or waste discharge requirements and degradation of water quality would be less than significant.

Response to Comment A8-41:

The commenter stated on Page 3-88, in the fourth paragraph (and Page 3-141), the Draft EIR states that compliance with the Ventura County TGM will be achieved by construction of a "dry extended detention basin" which are described in the TGM as "basins having outlets designed to detain the stormwater quality design volume (SQDV) for 36 to 48 hours to allow sediment particles and associated pollutants to settle and be removed." Construction of a dry extended detention basin (with hydrodynamic separation device pre-treatment) will not fully meet TGM requirements because it does cause the infiltration of the Stormwater Quality Design Storm (a $\frac{3}{4}$ inch storm). The dry extended detention basin is intended to allow settlement of particles and provides some infiltration as a by-product. This duplicates the purpose of the hydrodynamic device. Perhaps the designer intended to provide an 'Infiltration Basin' instead of a "Dry Extended Detention Basin" but all references to discharge of storms smaller than the SQDV should be eliminated from the document. The DEIR provides insufficient information to determine that the proposed project will not have significant impacts on stormwater quality.

The commenter suggested that "Perhaps the designer intended to provide an 'Infiltration Basin' instead of a "Dry Extended Detention Basin" in the EIR. As indicated in the response to Comment A8-40, based on review of with the Ventura County TGM, a Bioinfiltration BMP (or Rainwater Harvesting) infiltration basin would be appropriate for the known conditions at the Site. Therefore, all references to "dry extended detention basin" will be changed to "Bioinfiltration BMP Infiltration Basin". In addition, as requested in Comment A8-41, all references to discharge of storms smaller than the SQDV will be eliminated from the EIR document.

These clarifications do not change the finding in Section 3.9 of the EIR that with compliance with existing regulations including implementation of stormwater BMPs that target pollutants of concern in runoff from the project site, implementation of Mitigation Measure HYDRO-1, and connection to the OWTP, the potential for violation of water quality standards or waste discharge requirements and degradation of water quality would be less than significant.

Response to Comment A8-42:

The commenter stated on page 3-92, in the first sentence of the second paragraph, the Draft EIR states that compliance with the Ventura County TGM would reduce the effective impervious area of the site to no more than 5% of the project area. This statement is only true for storms less than or equal to the Stormwater Quality Design Storm which is somewhere between a 2-year and a 5-year storm. This statement is not true for any storm that exceeds the Stormwater Design Storm including pipe conveyance designs storms of 10-year or 100-year events.

The statement on page 3-92 of the Draft EIR indicating that that compliance with the Ventura County TGM would reduce the effective impervious area of the site to no more than 5% of the project area will be deleted from the Final EIR.

Response to Comment A8-43: See above with Response to Comments A8-39.

Response to Comments A8-44:

In Comment A8-44, the commenter states that the Draft EIR should include an alternative that does not convert prime agricultural land into a non-agricultural use, new schools should be consistent with CLUP per the City's General Plan Policy SH-9.3, the Draft EIR should include an alternative that does not include the Teal Club Specific Plan Project, the Draft EIR should identify the relationship between the project and the Teal Club Specific Plan Project, and that the proposed project should be a standalone project independent of the Teal Club Specific Plan Project.

As discussed in Section 5.0 of the Draft EIR:

"An EIR must describe a range of reasonable and of potentially feasible alternatives to the project, or to the location of the project, which would feasibly attain most of the basic Project Objectives but would avoid or substantially lessen any significant effects. The comparative merits of the alternatives must be evaluated. An EIR need not consider every conceivable alternative, but it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The range of alternatives is governed by a "rule of reason" that requires discussion of only those alternatives necessary for the Oxnard School District (Lead Agency) to make a reasoned choice."

An alternative that does not convert prime agricultural land into a non-agricultural use would involve either an alternative location, an alternative which increases the development intensity at existing school sites, or a no project alternative.

As discussed in the Draft EIR, Section 2. 1:

"The District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. A copy of the Potential New School Sites Study is provided in Appendix B."

As described in the Potential New School Sites, the alternative locations were rejected for various factors that made siting a school at these locations infeasible. An EIR is not required to consider alternatives that are infeasible, therefore, an alternative site location was not analyzed.

As discussed in the Draft EIR, Section 5.3.2,

"During the project scoping period OSD received public comments suggesting that the District increase the development intensity at existing school sites as a potential alternative. However, as indicated in the Master Construct and Implementation Program, the District has and continues to make facilities upgrades at District schools. This alternative would not meet the project objectives of providing a new K-5 school to accommodate 700 students in permanent classroom facilities or provide a new 6-8 school to accommodate 1,200 students in permanent classroom facilities. Therefore, it would be considered but rejected."

In Section 5.3.3.1 of the Draft EIR, a No Project Alternative was analyzed. As described in the Draft EIR:

"The No Project Alternative would result in the continuation of existing conditions on the project site. This would be the environmentally superior alternative as no significant unavoidable impacts would occur if the project site were to remain under agricultural production. However, the five Project objectives would not be met."

The proposed project's consistency with the Ventura County Airport Comprehensive Land Use Plan was analyzed in the Draft EIR, Section 3.8.2.3.

The Doris Avenue Patterson Road Educational Facilities Project is not part of the "Teal Club Specific Plan Project." The Teal Club Specific Plan Project is a separate project currently being processed by the City of Oxnard that includes the project site with a different development scenario.

The Draft EIR evaluated the environmental impacts for the project as proposed, which includes annexation into the City of Oxnard as identified in Section 2.4, Project Description, of the Draft EIR. As discussed in Section 2.4, annexation of the project site to the City would require LAFCo approval of several changes of organization, collectively called reorganization. LAFCo approval of the proposed project is not predicated upon the approval and annexation of the Teal Club Specific Plan Project.

Should changes to the project description occur in the future, OSD acknowledges that additional environmental evaluation may be warranted.

A9



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

January 18, 2018

David Fateh
Oxnard School District
1051 South A Street
Oxnard, CA 93030

Subject: Doris Avenue/Patterson Road Educational Facilities Project
SCH#: 2017051041

Dear David Fateh:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 17, 2018, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,


Scott Morgan
Director, State Clearinghouse

JAN 23 11 18 RCVD

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# 2017051041
Project Title Doris Avenue/Patterson Road Educational Facilities Project
Lead Agency Oxnard School District

Type EIR Draft EIR

Description The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. The project site is located within unincorporated Ventura County and within the city of Oxnard SOI area. The project will include a proposed reorganization which will be comprised of an annexation into the city of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. The District will process a GPA, PZ and an Annexation through the city.

Lead Agency Contact

Name David Fateh
Agency Oxnard School District
Phone 805-385-1501
email
Address 1051 South A Street
City Oxnard **State** CA **Zip** 93030
Fax

Project Location

County Ventura
City Oxnard
Region
Lat / Long 34° 12' 29.2" N / 119° 12' 27.0" W
Cross Streets Southeast corner of Doris Ave and North Patterson Rd
Parcel No. 183-0-070-090
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 1, 232
Airports Oxnard
Railways UPRR
Waterways Santa Clara River
Schools mult
Land Use Present: ag/Ventura GP: AG-urban reserve; Oxnard GP: public/semi-public, open space and park

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; California Department of Education; Department of General Services; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 12/04/2017 **Start of Review** 12/04/2017 **End of Review** 01/17/2018

Note: Blanks in data fields result from insufficient information provided by lead agency

Letter A9	State of California Governor’s Office of Planning and Research Scott Morgan, Director, State Clearinghouse
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Response to Comment A9:

State Clearinghouse acknowledged that OSD complied with State Clearinghouse review requirements for draft environmental documents. The Draft EIR was circulated to state agencies for review and no state agencies submitted comments during the review period.

A10



County of Ventura
PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
 Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: 1/23/2018

TO: RMA Planning Division
 Attention: Anthony Ciuffetelli

FROM: Anitha Balan, Engineering Manager II 

SUBJECT: REVIEW OF DOCUMENT 17-014-1 DEIR
 Project: **Doris Patterson Educational Facilities Project**
 Lead Agency: **Oxnard School District**
 Oxnard School District proposes to construct and operate a new elementary school, middle school, and a District Administrative Center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road
 APN# 1830070090

Pursuant to your request, the Public Works Agency – Transportation Department has reviewed the DEIR for the Doris Patterson Educational Facilities Project.

Oxnard School District (OSD) proposes to construct and operate a new elementary and middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The project site is located within unincorporated Ventura County and within the City of Oxnard Sphere of Influence area. The project site will be annexed into the City of Oxnard.

The proposed project includes 700 elementary school students and 1,200 middle school students. In total, the proposed project would comprise approximately 178,678 square feet of building and structures and provide 220 parking spaces onsite. According to the Traffic Study included in the DEIR, the project will generate approximately 3,551 trips.

We offer the following comment(s):

1. The cumulative impacts of the development of this project, when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, will be potentially significant. To address the cumulative adverse impacts of traffic on the County of Ventura Regional Road Network, the appropriate Traffic Impact Mitigation Fee (TIMF) should be paid to the County when the development occurs. Based on the information provided in the DEIR for the Doris Patterson Educational Facilities project, and the reciprocal agreement between the

City of Oxnard and the County of Ventura, the fee due to the County is:

$$3,551 \text{ ADT} \times \$30.58 \text{ ADT} = \$108,589.58$$

The above is an estimate only based on information provided in the Traffic Study prepared by Kunzman Associates on November 2, 2017

2. The proposed project site will be annexed into the City of Oxnard. Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval. The project site is located in unincorporated Ventura County. The project site is also within the City of Oxnard's Sphere of Influence (SOI). The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of approximately 25 acres. The DEIR should include provisions and conditions concerning the annexation to avoid the creation of county "islands".
3. LAFCo guidelines under Section 3.2.1 state that cities shall annex entire roadway sections and complete intersections adjacent to the territory proposed to be annexed. Patterson Road from Doris Avenue to Teal Club Road should be annexed into the City as reflected in the LAFCo guidelines under Section 3.2.1. Road improvements to Patterson Road and intersection of Patterson Road and Doris Avenue must follow City standards.
4. Traffic signal warrants addressed in the Traffic Study should follow guidelines as specified in the California Manual of Uniform Traffic Control Devices (CA MUTCD) 2014, Revision 2.
5. There is an existing issue with illegal dumping within public road right of way in the project vicinity. Street lighting around the school perimeter and intersection is recommended to partially mitigate the issue.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

Letter A10	Anitha Balan County of Ventura Public Works Agency Transportation Department
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This letter was received on January 31, 2018 which was 14 days past the close of the public comment period. OSD did not respond to this letter because it was submitted late and there was insufficient time to prepare a response.

A11

From: Rob Corley [mailto:RCorley@cde.ca.gov]
Sent: Wednesday, February 21, 2018 3:17 PM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: Doris-Patterson (Teal Club) site

David,

Here are my comments on Doris-Patterson.

I see the District Office is still programmed for the Doris-Patterson site. I have long argued with CFW and others that this should be reconsidered. The District Office may be located anywhere within District boundaries and there is no reason to bring crowding and extra traffic to this campus.

This site will have two schools with a total of 1,900 students. CDE standards call for 30.8 acres for these schools vs the 25 gross acres available.

If the 25 acres are reduced by 2-3 acres for street widening, etc and then lose 2 acres for the District Office this leaves about 20 usable acres for 1,900 students. Without the District Office the site is just at 70% of standards. With the District Office it is 65% of minimum standards.

Also note restrictions imposed due to the site's location within Traffic Pattern Zone 6. Occupancy limits were included in the approval letter from CalTrans.

Traffic remains a big challenge. How will vehicles coming from the east enter the parking area for either school or the District Office? U-turns next to a school crosswalk are very unsafe. The DO at the corner means no space for a left turn pocket to allow access from southbound Patterson. Teal Club Road is a rural road not suitable for peak hour traffic.

District Office traffic burdens an already challenging site layout. There are 62 parking spaces and many more trips per day as people arrive for meetings, etc.

The District does not have site approval or plans approval. Please share my concerns with others on Cabinet, I encourage the District to find another location for the District Office and get the plans approved before this gets too far ahead.

Thanks,

Rob Corley
CDE
805-835-3089

Letter A11	Rob Corley California Department of Education
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This email was received on February 21, 2018 which was 35 days past the close of the public comment period. OSD did not respond to this letter because it was submitted late and there was insufficient time to prepare a response.



VENTURA LOCAL AGENCY FORMATION COMMISSION

COUNTY GOVERNMENT CENTER • HALL OF ADMINISTRATION

800 S. VICTORIA AVENUE, L #1850 • VENTURA, CA 93009

TEL (805) 654-2576 • FAX (805) 477-7101

WWW.VENTURA.LAFCO.CA.GOV

A12

February 23, 2018

SENT VIA E-MAIL

Mr. David Fateh
 Director of Facilities
 Oxnard School District
 1051 South "A" Street
 Oxnard, CA 93030

Subject: Notice of Completion and Availability of a Draft Environmental Impact Report (EIR) for the Oxnard School District's Doris/Patterson Educational Facilities Project.

Dear Mr. Fateh:

Thank you for providing the Ventura Local Agency Formation Commission (LAFCo) with the opportunity to review the Draft EIR for Doris/Patterson Educational Facilities Project. We realize that submittal of these comments is late, and request that the Oxnard School District (OSD) consider them as it prepares the Final EIR for the development project.

As a responsible agency under the California Environmental Quality Act (CEQA), LAFCo is charged with ensuring that environmental documents prepared by lead agencies address the issues that relate to LAFCo's scope of authority. Please note that the Commission has not reviewed the Draft EIR, and these comments are solely those of the LAFCo staff.

LAFCo's purposes are to (1) discourage urban sprawl, (2) preserve open space and prime agricultural land, (3) ensure efficient provision of government services, and (4) encourage the orderly formation and development of local agencies, such as cities (Government Code § 56301). The Ventura LAFCo has adopted local policies that it must consider when making decisions on proposals. Specifically, the policies contained in Divisions 3 and 4 of the Ventura LAFCo Commissioner's Handbook¹ (Handbook) apply to the proposed project.

Note that these comments emphasize that land immediately west of the project site (i.e., west of the currently-configured Patterson Road) has been identified as agricultural land to remain in the unincorporated County area. In short, land immediately west of the project site is:

- Located outside the sphere of influence of the City of Oxnard;
- Located outside the City of Oxnard's urban restriction boundary (CURB);
- Located within the Ventura-Oxnard Greenbelt;
- Designated as *Agricultural* in the Ventura County General Plan;

¹ The Handbook is available on the Ventura LAFCo website at www.ventura.lafco.ca.gov, and can be found by clicking on the "Policies" tab.

David Fateh
 February 23, 2018
 Page 2 of 9

- Designated as *Agriculture* in the City's General Plan (in reference to the County's designation); and
- Located within an Agricultural Preserve²

The project design should be sensitive to the fact that the facility will, in all likelihood, neighbor unincorporated agricultural land for the long term. In order to help separate anticipated urban use of the project site from the neighboring agricultural land, the project area that abuts that agricultural land is currently designated by the City's General Plan as *Park*.

Project Description

The OSD is the lead agency for the subject project. If approved, the project would involve the construction and operation of: (1) an elementary school (accommodating 700 students), (2) a middle school (accommodating 1,200 students), and (3) a district administrative center. The proposed development would be located on a 25-acre site at the southeast corner of Doris Avenue and Patterson Road, immediately south of the City of Oxnard's existing boundaries. The facility would include classrooms, offices, and various other buildings in support of the two schools, as well as internal driveways, parking lots, and several play fields (approximately 178,678 square feet of building and structures).

Implementation of the project would result in improvements and widening of the Patterson Road right-of-way (immediately west of the proposed facility), so that the right-of-way aligns with the existing Patterson Road right-of-way north of Doris Avenue. This would involve acquisition of a portion of the neighboring property to the west. The project description acknowledges the requirement to amend several agencies' spheres of influence to include the adjoining segment of Patterson Road and agricultural land to the west. However, the project description does not clearly state that the land area for road widening is included in the project, and the map exhibits provided do not clearly show it to be a part of the project area. The project description and map exhibits should clearly describe this land area as being part of the project.

The project site has historically been used for crop production. It has a County General Plan land use designation of *Agricultural – Urban Reserve* and a zoning designation of *Agricultural Exclusive (40 acre minimum parcel size) (AE-40 ac)*. The project area contains City General Plan designations of *Park*, *Public/Semi Public*, *Open Space*, and *Agriculture* (the *Agriculture* designation is limited to territory immediately west of the proposed facility to be used for road widening associated with the project). The project description states that the OSD is proposing a General Plan Amendment to designate the land as *School* and pre-zoning to zone the land as *C-R (Community Reserve)*, and that schools are an allowed use within the *C-R* zone. The proposed General Plan designation and zoning designation is not clear for the portion of the project site to be used for Patterson Road widening. The OSD is also requesting a special use permit from the City for the development of the facility.

The City is currently processing a request for the approval of the Teal Club Specific Plan, which includes the proposal area and surrounding land to the south and east. Under the Specific Plan, the

² Government Code § 51201(d) and the Ventura County Land Conservation Act Guidelines define an agricultural preserve as an area devoted to either agricultural, recreational, or open space use, or any combination of these.

David Fateh
February 23, 2018
Page 3 of 9

subject project area would be used as a public facility, however the specific use has not been identified. Staff recommends that the OSD collaborate with the City so that the subject project can be integrated into the Specific Plan (in case the Specific Plan project moves forward), and to establish whether the City would be amenable to extending municipal services to the project site if it is developed independently of the Specific Plan.

Request to LAFCo

The Draft EIR accurately identifies LAFCo as a responsible agency under CEQA, whose approval is required in conjunction with the development of the project.

Reorganization:

In order for the project site to be developed as proposed and receive municipal services, the project area must be annexed to the City. Annexation of the proposal area to the City requires LAFCo approval of several changes of organization, collectively known in LAFCo law as a reorganization. The following LAFCo actions are necessary components of the reorganization:

- Annexation to the City of Oxnard;
- Annexation to the Calleguas Municipal Water District;
- Annexation to the Oxnard Harbor District³;
- Detachment from Oxnard Drainage District No. 1;
- Detachment from the Ventura County Resource Conservation District;
- Detachment from the Ventura County Fire Protection District;
- Detachment from Ventura County Service Area No. 32; and
- Detachment from Ventura County Service Area No. 33.

Inclusion of Patterson Road Right-of-Way:

Handbook Section 3.2.1 provides, in part that, “Except in extraordinary circumstances, cities shall annex entire roadway sections adjacent to territory proposed to be annexed and shall include complete intersections.” In addition, the site plan indicates road widening of Patterson Road that would extend off-site and westward into neighboring agricultural property. Therefore, the project description should be elaborated to clearly demonstrate that the adjoining portion of the Patterson Road right-of-way, and any additional territory necessary for improvements, is included as part of the proposed reorganization.

Sphere of Influence Amendments:

The following sphere of influence amendments are necessary LAFCo actions to implement the project:

³ This requested action is in addition to those noted in previous correspondence regarding the project.

David Fateh
 February 23, 2018
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- Amendment of the City of Oxnard’s sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west;
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west;
- Amendment of the Oxnard Harbor District sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west⁴;
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west; and
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area.

LAFCo has policies related to sphere of influence amendments involving schools (Handbook Section 4.3.3), which should be considered by the OSD as it evaluates project feasibility.

City Urban Restriction Boundary (CURB):

As discussed above, territory to the west of the proposed development site will be used for widening of Patterson Road. This area is outside the City’s CURB. Voter approval is generally required for the extension of City services outside the City’s CURB. The Draft EIR states that the City Council may amend the CURB for this project, absent a public vote. Regardless of the method used to modify the CURB, please note that Ventura LAFCo has adopted policies that proposed reorganizations and sphere of influence amendments should be consistent with voter-approved growth boundaries (i.e., the CURB) (Handbook Sections 3.2.4.2 and 4.2.1).

Ventura-Oxnard Greenbelt:

Territory to the west of the proposed school site will be used for widening of Patterson Road. This area is included within the Ventura-Oxnard Greenbelt Agreement. The purpose of greenbelts is to preserve agriculture and/or open space, provide separation between cities, and/or limit the extension of urban services. In general, cities agree not to pursue annexation of land subject to a greenbelt agreement. LAFCo policies generally provide that, unless exceptional circumstances exist, LAFCo will not approve proposals that are in conflict with greenbelt agreements (Handbook Section 3.2.4.4).

The Draft EIR explains that road and infrastructure improvements have historically not been considered “development” subject to greenbelt agreements. However, the following text is included as Section 7 of the Ventura-Oxnard Greenbelt Agreement, which is the applicable greenbelt for the land in question:

The boundaries of this Greenbelt should be consistent with the San Buenaventura and Oxnard spheres of influence, where applicable. The coterminous greenbelt/sphere of influence boundary, consistent with Ventura LAFCo’s policies and procedures, should serve as the limit for the extension of urban services and infrastructure.

⁴This requested action is in addition to those noted in previous correspondence regarding the project.

David Fateh
February 23, 2018
Page 5 of 9

Because spheres of influence represent the probable ultimate boundaries of incorporated cities, the Greenbelt should not extend into the sphere of influence of any of the two Cities until there is a comparable adjustment to the sphere of influence (urban growth boundary). If a future expansion or reduction of the spheres of influence is approved by the Ventura LAFCo, then the Greenbelt boundaries should be adjusted accordingly, so as to assure consistency. This ordinance does not establish any regulatory authority over spheres of influence or annexations.

Based on the provisions of the Ventura-Oxnard Greenbelt Agreement, it would be appropriate for the Greenbelt Agreement to be modified, as previously indicated. Specifically, modification of the Greenbelt Agreement would align the Greenbelt boundary with the proposed City of Oxnard sphere of influence boundary, and reflect the limits of urban infrastructure (i.e., Patterson Road). Therefore, the project should include a proposed amendment to the Ventura-Oxnard Greenbelt Agreement to exclude this area. Note that amendments to a greenbelt agreement require approval from all parties to the agreement.

Parcel Boundary:

The proposal area is a portion of a larger agricultural parcel. Additionally, as discussed above, a portion of the neighboring parcel directly to the west will be needed for the widening of Patterson Road. Ventura LAFCo has adopted a policy requiring that proposals conform to lines of ownership or assessment, and that they involve only legal lots (Handbook Sections 3.1.4.2 and 3.1.4.3). The project description states that an exemption from map requirements of the Subdivision Map Act is allowed for property transferred to or from a government agency, subject to Government Code § 66428(a)(2). Therefore, it appears that the proposal area will consist of a legal lot or lots.

LAFCo Law and Additional Ventura LAFCo Policies

Several topics of study have been included in the Draft EIR. In our comments on the Notice of Preparation (NOP) for the project, we stated that the EIR should include an analysis of agricultural resources and airport hazards, in order to adequately address the subjects that are within LAFCo's scope of authority. This analysis is necessary for LAFCo consideration of the reorganization and sphere of influence amendments (Government Code §§ 56668 and 56425).

Agricultural Resources

The Draft EIR includes an evaluation of the proposed development on agricultural land and agricultural resources. In analyzing impacts to agricultural resources, LAFCo must apply the definition of prime agricultural land contained in LAFCo law (Government Code § 56064), which includes standards relating to the value of agricultural products and the soils classification determined by the Natural Resources Conservation Service. The Draft EIR explains that 100% of the 25-acre project site consists of "Grade 2 soils with a Storie Index rating of 80." This rating qualifies the land as prime agricultural land under Government Code § 56064.

David Fateh
February 23, 2018
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The Draft EIR acknowledges the significant impact to agricultural land, but includes no evaluation of mitigation measures for the impact, explained as follows:

The permanent conversion of Farmland of Statewide Importance to non-agricultural uses would result in a significant impact. While City policies encourage establishment of a farmland protection program and use of conservation easements and land banking to protect continued agricultural uses throughout the City's SOI [sphere of influence], presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009). The City also has policies and programs that support existing agricultural buffers (such as the SOAR Ordinance) in order to reduce or slow further loss of agricultural resources, however, these policies do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce this impact to a less than significant level, therefore this impact would remain significant and unavoidable (City of Oxnard 2009).

Despite the conclusion that impacts to agricultural land will be significant and unavoidable, the Draft EIR states that no mitigation measures are proposed because: (1) the City does not have a program for collection and use of agricultural mitigation fees, and (2) policies and programs to reduce or slow loss of agricultural resources do not offset an actual loss of farmland. However, land used as mitigation need not be located in (or in close proximity to) the jurisdiction requiring the mitigation, and implementation of such mitigation need not be limited to jurisdictions that have an established program to manage such mitigation requirements.

CEQA does not require that feasible mitigation measures result in a less than significant impact, but instead that they “avoid, minimize, rectify, reduce or eliminate, or compensate” for the impact (CEQA Guidelines § 15370). Therefore, in order for the EIR to be in compliance with CEQA, LAFCo staff encourages City staff to incorporate into the project description and evaluate in the document mitigation measures that would reduce the potential impacts to agricultural resources. If the EIR concludes that no agricultural mitigation measures are feasible, documentation to support that conclusion should be included.

In support of CEQA, please note that Handbook Section 1.4.3.1(d) states that: “For projects that would result in the conversion of prime agricultural land to non-agricultural uses, the environmental document should consider mitigation measures to address the potential loss of the agricultural land, as provided for under Government Code Section 65965 et al.” To assist the OSD in complying with this policy, LAFCo has prepared *Ventura LAFCo Informational Guidelines for the Consideration of Agricultural Mitigation Measures*⁵ which includes examples of mitigation measures and related implementation factors for consideration by lead agencies as they prepare environmental documents.

The Draft EIR states that the County's Agriculture/Urban Buffer Policy (which exists to prevent or mitigate conflicts between agricultural and urban uses) does not apply to the project because:

⁵ The *Ventura LAFCo Informational Guidelines for the Consideration of Agricultural Mitigation Measures* is available on the Ventura LAFCo website at www.ventura.lafco.ca.gov, and can be found by clicking on the “Documents & Links” tab.

David Fateh
February 23, 2018
Page 7 of 9

These guidelines apply to projects requiring discretionary approval by the county or a city where the proposed non-farming activity is abutting or on land zoned AE, OS or RA, and the farming activity is located outside a Sphere of Influence, as adopted by LAFCo. However, the project site is located within the SOI for the City of Oxnard and buildout of the site was accounted for as part of the 2030 General Plan. In addition, the proposed project includes annexation into the City of Oxnard with a proposed C-R zone, thereby the County's land use designations would no longer be applicable to the project site.

The EIR should re-evaluate the conclusion above, considering that: (1) land located contiguous to and west of the project site is outside the sphere of influence of the City and has a County zoning designation of *Agricultural (AE)*, (2) non-farming activities are proposed adjacent to land in agricultural production that is classified as prime farmland, and (3) there is no evidence that the Ventura County Agricultural Policy Advisory Committee or Ventura County Agricultural Commissioner has granted an exception to the County's Agricultural/Urban Buffer Policy. When reviewing the proposal, LAFCo will also consider "whether the proposal adversely affects agriculture and/or provides buffers between the school site and adjacent agriculture" (Handbook Section 4.3.3.3(c)), independently of the County's Agricultural/Urban Buffer Policy.

As noted previously in these comments, land immediately west of the project site is planned to remain as unincorporated agricultural land. The Draft EIR states that the OSD has designed the project to minimize compatibility issues with adjacent agricultural uses, and has configured the proposed development in consultation with the Ventura County Agricultural Commissioner. It does not appear, however, that the Draft EIR addressed several of the City's General Plan policies pertaining to agricultural/urban compatibility. The City's General Plan contains policies in support of buffers to protect agricultural land from urban uses (e.g., open space setbacks, berming, and windrows), and specifically encourages buffer areas around schools to separate school facilities from active agricultural operations. The EIR should address whether the project complies with the City's General Plan policies.

Although not necessarily a CEQA matter, LAFCo policies provide that for proposals that would convert prime agricultural land, an alternative site analysis must be prepared (Handbook Sections 3.3.5.2 and 4.3.2.2). If the EIR does not include this evaluation, LAFCo will require that it be submitted in order for the Commission to consider the requests for a reorganization and sphere of influence amendments.

Finally, the evaluation of impacts to agricultural land should include an analysis pursuant to Handbook Section 3.3.5, which states that in order to approve a proposal that would likely result in the conversion of prime agricultural land, the Commission must find that the proposal will lead to planned, orderly, and efficient development. Related, Handbook Section 4.3.3.3(d) states that when reviewing a proposal, the Commission will consider whether a proposed school is the best site available when considering logical, orderly, and efficient city boundaries and adopted greenbelts.

David Fateh
February 23, 2018
Page 8 of 9

Airport Hazards

The proposed development includes the construction of an elementary school and a middle school. The project area is located within the Traffic Pattern Zone (TPZ) of the Oxnard Airport, as documented in the *Airport Comprehensive Land Use Plan Update for Ventura County (CLUP)* (July 7, 2000). According to Table 6B of the CLUP, and as noted in the Draft EIR, schools are identified as an unacceptable use within the TPZ. LAFCo does not favor approval of proposals that are inconsistent with applicable plans adopted by any governmental agency (Handbook Section 3.3.1.2(c)) or proposals that would accommodate new development within a hazardous area unless the Commission determines the hazard(s) can be adequately mitigated (Handbook Section 3.3.1.2(h)).

The Draft EIR does not demonstrate consistency with the CLUP, and states that the “worst-case scenario” project impact from airport hazards would be potentially significant and unavoidable. Based on comments provided by both the Ventura County Transportation Commission (January 8, 2018) and Ventura County Department of Airports (January 12, 2018), the Draft EIR does not adequately address concerns regarding hazards (including noise and potential danger from accidents) from aircraft activity occurring near and over the project site.

Water Service

The Draft EIR also includes a discussion of water supply and demand related to the project. According to the analysis contained in the document, the estimated annual project water demand is 17.4 acre-feet per year (AFY) and the applicant intends to transfer approximately 37.5 AFY of historical groundwater allocations to the City. This would result in a net increase in water supply resources for the City. However, according to staff of the Fox Canyon Groundwater Management Agency (which manages groundwater resources within the Fox Canyon aquifer and regulates groundwater extractions), allocation transfers associated with the historical allocation system are on hold while an emergency ordinance (i.e., Emergency Ordinance E) is in effect. The water analysis included in the Draft EIR should be revised to reflect that the project would result in an increased demand on City water supplies.

Additional Comments

The Draft EIR included a discussion of alternatives to the project, limited to the “no project alternative” and a “reduced project use alternative.” Pursuant to CEQA Guidelines § 15126.6, an EIR should include “a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” Considering the environmental concerns related to the proposed project location (e.g., impacts to agricultural land and potential hazards (i.e., aircraft noise and accident potential)), alternative locations of the project should be included in the OSD’s project alternatives analysis.

If the issues identified in these comments are not addressed in the EIR, they are required to be addressed by the City as part of its application to LAFCo.

David Fateh
February 23, 2018
Page 9 of 9

As a reminder, the Ventura LAFCo encourages prospective applicants to meet with LAFCo staff early in the planning process⁶. We find that such consultation and ongoing communication is helpful to clarify the nuances of LAFCo requirements and to avoid delays later in the process.

Please contact me if you have any questions.

Sincerely,

Andrea Ozdy

Andrea Ozdy
Analyst

c: Kathleen Mallory, City of Oxnard
Todd McNamee, Ventura County Department of Airports
Darren Kettle, Ventura County Transportation Commission
Kim Prillhart, Ventura County Planning Division

⁶ A letter from the Commission to prospective applicants is available on the Ventura LAFCo website at www.ventura.lafco.ca.gov, and can be found by clicking on the "Applications & Fees" tab.

Letter A12	Andrea Ozdy Ventura Local Agency Formation Commission
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This letter was received on February 23, 2018 which was 37 days past the close of the public comment period. OSD did not respond to this letter because it was submitted late and there was insufficient time to prepare a response.

P1

From: Carol Greager [<mailto:carolgreager@gmail.com>]

Sent: Wednesday, December 13, 2017 3:00 PM

To: Rubles-Scis, Veronica - School Board Trustee; Morales, Cesar; O'Leary, Denis - School Board Trustee; Cordes, Diabra - School Board President; Morrison, Emie - School Board Clerk; Madrigal Lopez, Monica - School Board Trustee

Subject: Re: Dons/Patterson Campus Project

Board Members,

Will there be another opportunity to address your group regarding subject plans? I myself was unable to attend due to the air quality that day & I believe other homeowners may have been distracted or involved with fire relief efforts. Please advise if the homeowners in the adjacent areas will have another opportunity to present to the board. If not, to whom may we go to press ahead with our oppositions? Thank you.

P1-1

Letter P1	Carol Dreager Individual
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Response to Comment P1-1:

OSD received an email from Ms. Dreager on December 13, 2017 asking if there would be additional opportunities to comment on the proposed project given that she was unable to attend the public meeting due to air quality. On December 15, 2017, the District emailed the following reply:

“Dear Ms. Dreager,

The Draft EIR is currently under a 45-day public review period which began on December 4, 2017 and ends on January 17, 2018 at 5:00 P.M.

All interested parties are invited to submit written comments on the Draft EIR. Please submit your written comments by the January 17, 2018 deadline to:

*Mr. David Fateh, Director of Facilities
Oxnard School District
1051 South A Street
Oxnard, California 93030*

After the close of the public review period and preparation of responses to public comments received on the Draft EIR in the Final EIR, the District’s Board will consider the adoption of the Final EIR as well as conduct a public hearing. This date has not yet been set, however is anticipated for a Board meeting date in March 2018.

*Thank you,
David Fateh”*

P2

Paul Giacobbe
1200 Yukonite Place
Oxnard, CA 93030
9 December 2017

Mr. David Fatch, Director of Facilities
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

Subj: DRAFT ENVIRONMENTAL IMPACT REPORT, DORIS AVE AND PATTERSON RD
SCHOOL CAMPUS

Encl: (1) LA Times Article of 23 August 1997 – Plane Crash At Field Near Oxnard Airport

The Oxnard School District proposes that a campus be built at Doris Ave and Patterson Rd in Oxnard, CA. This location is next to an agricultural field, between Patterson Rd and Victoria Ave, and is within one mile of the Oxnard Airport.

Pesticides, such as herbicides, insecticides and fumigants, are applied to the crops at the agricultural field. These pesticides are used to control weeds, harmful insects and plant diseases. Sprayed pesticide can drift and have a negative impact on teachers and children at the school campus. Possible long-term effects can be cancer, neurological disorders, reproductive problems, birth defects and infertility. Even low level pesticide exposure, over time, can lead to these chronic health problems.

P2-1

In August of 1997 there was a plane crash in this area. A plane sheared off the chimney of a house on Ivanhoe Ave. It then slammed into a cement light pole on Doris Ave ripping off a wing. The wing landed on the street bursting into flames. The plane crashed into the field across the street; the proposed site of the school project. It is noted that the plane was in trouble and was making a bee line to the Oxnard Airport. It was not in the airport flight path. Because the school project is not in the flight path does not mean there is no danger. See enclosure (1).

P2-2

An article appeared in the Ventura County Star on 2 September 2015. Edwards Air Force Base conducted test flights, with F-35 fighter jets, at the Oxnard Airport. Military jets have crashed and destroyed homes in the San Diego area in the recent past.

Doris Ave and Patterson Rd is a potentially dangerous place for a school campus.

Yours truly,



Paul Giacobbe

SECRET

2 Men Seriously Hurt When Plane Crashes Into Field

Aviation: A third man receives minor injuries after the single-prop Cessna, on an instructional flight, fails to make an emergency landing at Oxnard Airport.

August 23, 1997 | DAWN HOBBS and SCOTT HADLY | SPECIAL TO THE TIMES

OXNARD — Two men suffered lacerations and broken bones when their single-propeller Cessna clipped a house and crashed into a lima bean field Friday afternoon as they attempted an emergency landing at the Oxnard Airport.

A third man suffered minor injuries.

"We were talking in the living room and playing Nintendo, then we heard this big boom and the house shook like a big earthquake," said Julie Plascencia, 14, who was in the two-story beige home. "I was too scared to think about what it was."

The plane, on an instructional flight out of Camarillo Airport, apparently suffered engine failure before it sheared off the top of a chimney and some red roof tiles on the house on Ivanhoe Avenue about 2:30 p.m.

The Cessna 210 then slammed into a cement light pole across the street on Doris Avenue, ripping off a wing and crashing into the bean field just steps away from farm workers. The wing left behind in the street burst into flames and unleashed a black column of smoke.

Shirley Clark was watering plants in her backyard on Nottingham Drive when she spotted the plane gliding suspiciously quiet—just above rooftop level.

"I did not hear a motor but the prop was turning," Clark said.

Then she saw fear on the pilot's face.

"The expression on the man was frightening," she said. "Obviously he had lost power. I give the man credit for trying to get the plane into an open field."

By the time Oxnard firefighters arrived, one of the men was standing next to the wreckage, said Fire Department Battalion Chief Terry McAnally. The man seemed to have escaped serious injury.

Two other men were trapped beneath the plane. One was lying under the wing, and firefighters were able to pull him out. The other was pinned under the left side, paramedics and firefighters said. Both suffered broken ankles and serious lacerations.

All three were taken to St. John's Regional Medical Center.

"Everybody is conscious. Everybody is talking," said Lynn Borman, a paramedic supervisor with Gold Coast Ambulance Company.

Hospital officials identified the men as 34-year-old Michael Macias, a certified flight instructor with Sun-Air Aviation Inc. in Camarillo, and Beat Leu, 33, and Markus Vogel, 41, both of Switzerland. All three were listed in fair condition, a hospital spokeswoman said.

"It was a clear day. It's hard to say what happened," McAnally said. "There was no report of any landing gear down. They hit the roof, the pole and then tore off the wing. They're lucky they got away from it . . . if lucky is the word."

Tad Dougherty, manager of the Oxnard Airport, said the pilot tried at the last minute to avoid the homes.

"He probably saved somebody," Dougherty said. "An experienced pilot will do everything he can to land the plane in a vacant field. He doesn't want to hit the house because he will injure himself as well as anybody in the house."

Residents in the nearby housing tract said that although they live near the Oxnard Airport they had never feared crashes before.

"When we first came to look at the house we questioned the developer here about the planes," said Gail Johnson, who lives across the street from the home clipped by the plane. "We were told we were not in a flight path."

Crash investigators with the Federal Aviation Administration and the National Transportation Safety Board arrived about two hours after the accident to scrutinize the wreckage.

Investigators said it would be at least a day before they could determine a cause for the accident, said Brian Ashton, an FAA official at the scene.

Air traffic controllers at Point Mugu Naval Air Station reported receiving a distress call from the pilot about 2:30. The Cessna had lost power and was at an altitude of about 1,300 feet and falling, said Phyllis Thrower, a Navy spokeswoman.

The plane was bound for Burbank but developed trouble about two miles from the Oxnard Airport, Thrower said.

A representative at Sun-Air declined comment.

An instructor at another flight school at the Camarillo Airport said Sun-Air operates a Cessna 210 with the matching tail number.

Hadly is a staff writer and Hobbs is a correspondent. Times staff writer Hilary MacGregor and correspondents Nick Green and David Greenberg contributed to this story.

Letter P2	Paul Giacobbe Individual
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Response to Comment P2-1:

Mr. Giacobbe describes the location of the project site and notes this location is next to an agricultural field. Mr. Giacobbe commented that pesticides applied to the agricultural field can drift and have a negative impact on teachers and children at the school campus. The potential for the proposed project to result in a health hazard due to nearby agricultural chemical use was addressed in Section 3.2 of the Draft EIR.

As noted in Section 3.2 of the Draft EIR:

“Indirect impacts could occur with the conversion of the project site from agricultural uses to non-agricultural uses. This type of impact is mainly due to compatibility issues with the adjacent agricultural land still in production (City of Oxnard 2009). Potential compatibility issues may include nuisance effects to a project site from noise, dust, odors, and drift of agricultural chemicals....The City of Oxnard 2030 General Plan contains policies intended to reduce this type of land use incompatibility including policies CD-6.1 and ER-12.11 (providing adequate agricultural buffer areas) and policy ER-12.2 (supporting right-to-farm policies). The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues. Per the County of Ventura Agriculture/Urban Buffer Policy, a 300-foot setback from adjacent agricultural uses to new structures and sensitive uses is required on the non-agricultural property unless a vegetative screen is installed. With a vegetative screen, the buffer/setback is a minimum of 150 feet....While the County of Ventura Agriculture/Urban Buffer Policy would not apply to project, the District has designed the lay-out of the project in order to minimize compatibility issues with adjacent agricultural uses. Based on input from the Ventura County Agricultural Commissioner, the proposed project was designed to cluster the school facilities within the middle of the northern portion of the site closer to the existing residential neighborhood to the north.” As described further in the Draft EIR, the buffers between the school facilities and the surrounding agricultural uses adhere to the guidelines in the County of Ventura Agriculture/Urban Buffer Policy.

Also as noted in Section 3.2: “In addition, as appropriate and applicable, the District will follow recommendations in *Farming Near Schools, A Community Guide for Protecting Children* (Ag Futures Alliance 2002).”

With the implementation of these policies, as appropriate, to compatibility issues associated with location of the project site near agricultural uses (including nuisance effects to the project site from drift of agricultural chemicals) would be less than significant.

No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P2-2:

Mr. Giacobbe provided information on previous plane crashes and commented that because the school project is not in the flight path does not mean there is no danger. The potential for the proposed project to result in a safety hazard when located within 2 miles of an airport was addressed in Section 3.8 of the Draft EIR and an Aircraft Hazard and Land Use Risk Assessment was conducted for the project site and included as Appendix I in the Draft EIR.

As noted in Section 3.8 of the Draft EIR:

“An aircraft accident can occur at any time and at any place. An accident within or near the project site could involve an aircraft taking off from or landing at Oxnard Airport or it could involve an aircraft enroute between two other airports, with no connection to Oxnard Airport. There is no way to completely guard against such occurrences. We can, however, assess the relative probability of an accident occurring within a specific area. One method of estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years. However, there are no “standards” that specifically address this issue. Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.”

No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

January 11, 2018

Oxnard School District Board Members

Re: Teal Club Project / Doris & Patterson

Dear Board Members,

Again I write in opposition to this build. Aside from the most common oppositions of proximity to airport, poor traffic infrastructure and water accessibility, my contention is not to reward the Board with two (2) new Admin offices @ a total of 6400 sq ft.

P3-1

The current performance of our elementary and middle schools is deplorable and improvement in performance is where this nearly half billion dollars needs to be invested and focused. More teachers or aides with smaller classroom sizes. Expand our current schools and if land access is prohibited, retro fit and build up.

P3-2

The most current rating of these two school types, in the CA standard rating system, is a 3 out of 10. How can any of you find this acceptable? In the private sector, in which I spent 40 years, last 20 as a General Manager, I needed to prove success with existing conditions, ie; manpower, facility size, sales growth and equipment, before my plant would even possibly be considered for an investment of capital improvement. Which is company money invested in me, my people and my customers. Why is it any different for the board? I am confused!

Additionally, the projected classroom size in these new schools is 30 students per classroom and the CA average is 20-22. With a total projected population of 1900 students and 64 classrooms, do the math, that is 29.6875 students per classroom. We //know, or should, that the more students in a classroom, the less individual attention each student will receive. This lack of individual attention will lead to nothing other than furthering your failure and that of our children.

P3-3

My previous writings have been solely restricted to the board, but this writing will be taken up to the higher pay grades.

Respectfully,

Carol Dreager
2701 Pyrite Pl
Oxnard, CA 93030

Letter P3	Carol Dreager Individual
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Response to Comment P3-1:

General comments in opposition to the proposed project due to proximity to the airport, poor traffic infrastructure, water accessibility and contention of including new administrative offices as part of the project. The Draft EIR addressed potential airport hazards in Section 3.8, traffic impacts in Section 3.14, and water in Section 3.9. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P3-2:

OSD acknowledges the commenter's opinions that current elementary school and middle school performance is "deplorable" and improvement in performance is where funds should be focused and invested. These are comments related to the merits of the project and do not raise issues related to the adequacy of the environmental document.

The commenter also suggested that OSD expand current schools and if land access is prohibited, retro fit and build up. As noted in Section 2.1 of the Draft EIR, the District has a Master Construct and Implementation Program and continues to make facilities upgrades at District schools.

Response to Comment P3-3:

The commenter's thoughts related to classroom student capacity are acknowledged. The proposed project is designed to meet the State's classroom loading standard of 25 students per classroom at the elementary level and 27 students per classroom at the middle school level. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P4

From: Fateh, David
Sent: Wednesday, January 17, 2018 9:50 AM
To: 'Jan Baskin-Smith' <Jan.Baskin-Smith@CJSETO.com>
Subject: RE: Responses to Draft EIR

Good Morning,

Thank you for your email. The District will accept all written comments postmarked by 1/17/18.

Thank you,

N. David Fateh
Director of Facilities
Oxnard School District
1055 South C Street
Oxnard, CA 93030
Office: (805) 385-1514 Ext. 2501
Fax: (805) 486-5848
Email: dfateh@oxnardsd.org

From: Jan Baskin-Smith [<mailto:Jan.Baskin-Smith@CJSETO.com>]
Sent: Tuesday, January 16, 2018 2:31 PM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: Responses to Draft EIR

Mr. Fateh,
I realize that the deadline for responses to the draft EIR are due tomorrow January 17, 2018.

However, I asked the United Postal Services today what was the current status of mail that is in the Goleta sorting station and has never been delivered since January 9.

I was told that this mail is stuck at the Goleta sorting station until the 101 freeway and can not be delivered.

Since this is an extenuating circumstance, could the deadline be extended from January 17 to allow the 101 freeway to open and mail to be delivered from Goleta?

Thank you,
Jan Baskin-Smith

P4-1

Letter P4	Jan Baskin-Smith Individual
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Response to Comment P4-1:

OSD received an email from Ms. Baskin-Smith on January 16, 2018 asking if the deadline for providing responses to the Draft EIR could be extended from January 17 to allow for the 101 freeway to open and mail to be delivered from Goleta. An email reply from the District was sent on January 17, 2018, indicating that the District would accept all written comments postmarked by January 17, 2018.

No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P5

From: Marg Skupien [mailto:moonchildgtows@yahoo.com]
Sent: Tuesday, January 16, 2018 3:18 PM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: Fwd: Teal Club Specific Plan

Sent from my iPhone

Begin forwarded message:

From: Marg Skupien <hildgtows@yahoo.com>
Date: January 16, 2018 at 2:06:06 PM PST
To: dcordes@oxnardsd.org, mcnison@oxnardsd.org, doleary@oxnardsd.org, vrobles_sole@oxnardsd.org, nunadngalopez@oxnardsd.org
Subject: Teal Club Specific Plan

I am writing to oppose the Doris/Patterson Road educational Facilities project. The Caltrans Aviation Safety officer recommended OSD "look for a different site further away from the airport runway." The school site would be within the traffic pattern ~~at~~ the Oxnard airport. In 2016 there were approximately 75,000 takeoffs and landings at this airport and the control tower was in communication with an additional 15,000 passing through the airspace. The Department of Airport Authority voted unanimously ~~against~~ the school site and the Teal Club Specific Plan. Aircraft noise levels could represent a significant adverse impact on the project and distracting for student learning and retention. P5-2
I am also concerned about the amount of increased traffic which would compound an already well trafficked Doris Road. P5-3
Please strongly consider voting against this project on Doris and Paterson Road.

P5-1

Sincerely,

Margaret Skupien
Resident of Cabrillo neighborhood

Sent from my iPad

Letter P5	Margaret Skupien Individual
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Response to Comment P5-1:

General comments in opposition to the proposed project due to the location near the Oxnard Airport. The potential for the proposed project to result in a safety hazard when located within 2 miles of an airport was addressed in Section 3.8 of the Draft EIR and an Aircraft Hazard and Land Use Risk Assessment was conducted for the project site and included as Appendix I in the Draft EIR.. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P5-2:

The commenter indicated that aircraft noise levels could represent a significant adverse impact on the project and distracting for student learning and retention. Potential noise impacts associated with implementation of the project were addressed in Section 3.8 of the Draft EIR. The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site is located just outside of the 60 dBA CNEL contour. Therefore, the noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and with typical educational facility construction with windows closed, interior noise levels from aircraft operations are expected to achieve 45 dBA CNEL or less, which achieves both the State and City interior noise requirements. Therefore, noise impacts from the Oxnard Airport are considered to be less than significant.

Response to Comment P5-3:

General comment regarding increased traffic on Doris Avenue. The Draft EIR addressed potential traffic impacts in Section 3.14. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P6

From: Charles A. Wilson [mailto:kyzyl@roadrunner.com]
Sent: Tuesday, January 16, 2018 9:20 PM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: Doris/Patterson Schools

David Fateh, Director of Facilities

Dear Mr. Fateh;

Please count my vote AGAINST locating any school or school office anywhere within a mile of the sides or ends of an airport runway. From every aspect, be it safety, aircraft engine noise, traffic congestion, or loss of farmland, locating a project at this location is ill-advised. For the benefit of the students, teachers, administrators, pilots, residents, and drivers, I hope that you move this project to another location further from the airport.

P6-1

Sincerely,
Charles A. Wilson
2701 Wood Opal Way
Oxnard CA 93030-8416
(805) 981-0438

Letter P6	Charles A. Wilson Individual
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Response to Comment P6-1:

The commenter provided general comments in opposition to the proposed project and hopes that the project be moved to another location further from the airport. As noted in Section 2.1 of the Draft EIR, the District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. A copy of the Potential New School Sites Study is provided in Appendix B of the Draft EIR. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P7

From: Steve Zacks [mailto:szacks1@aol.com]
Sent: Tuesday, January 16, 2018 10:17 PM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: Doris Avenue/ Patterson Road Educational Facilities DEIR

David,
 Comments on the DEIR for the Doris Avenue/ Patterson Road Educational Facilities are below.

1. Air Quality

DEIR

Page 3-29 The location of the project site is not expected to expose students to sources of substantial pollutant concentrations (e.g., industrial facilities emitting odorous or hazardous substances).

Comment:

The Edison power plant is upwind of the project site and it appears that the plant will be closing in the near future. However if the plant does not close down, then the potential impact of pollutants from the plant on the school children should be evaluated in the EIR.

P7-1

2. Traffic

DEIR

Page 3-126 The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for existing plus project traffic conditions, except for the following three study intersections: Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for existing plus project traffic conditions.

Page 3-129 The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) with project traffic conditions, except for the following six study intersections as shown in Table 9 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzalez Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10. With improvements, these six study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) with project traffic conditions.

Page 3-129 The Opening Year (2020) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been "conservatively" added to the traffic volume forecasts.

Page 3-129 The Interim Year (2021) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been "conservatively" added to the traffic volume forecasts.

Comment:

Was traffic from other projects outside of the Teal Club Specific Plan (such as Seabroga) that might impact some or all of the study intersections included in the traffic impact analysis?

If traffic from other projects outside of the Teal Club Specific Plan was not included in the traffic impact analysis, then would this outside traffic be accounted for by the conservative assumption described on page 3-129?

P7-2

Regards,

Steve Zacks
szacks1@aol.com

Letter P7	Steve Zacks Individual
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Response to Comment P7-1:

Commenter noted that the Edison power plant is upwind of the project site and it appears that the plant will be closing in the near future. However if the plant does not close down, then the potential impact of pollutants from this plant on the school children should be evaluated in the EIR.

It is assumed that by the Edison Power Plant the commenter means the McGrath Peaker Generating Station (the Facility) located at 251 North Harbor Boulevard, Oxnard, California 93036 and owned by Southern California Edison. The Facility Operates under Part 70 Permit with Permit Number 07891 (the Permit) issued by the Ventura County Air Pollution Control District pursuant to Rule 33.1. The Facility is a stationary source that generates electricity for sale to the public and is not anticipated to be shut down. The Facility generates electricity through a 49.9-megawatt electrical generator driven by a natural gas fire turbine. The Facility's emissions are regulated by the Permit which dictates maximum emissions allowed annually and hourly. The Facility is not considered a major stationary source of federal Hazardous Air Pollutants (HAPs), and its emissions are significantly below the 10 tons per year for a single HAP and 25 tons per year for combined HAPs for major sources. A health risk assessment (HRA) included as part of the Permit process yielded a cancer risk of 0.0008 in a million, well below the district's threshold of one in a million. Similarly, the Chronic Hazard and Acute Hazard Indices calculated in the HRA were reported as below the VCAPCD's threshold of 0.5. Consequently, there is no evidence to support a negative impact on the proposed project resulting from the Facility's operations.

Response to Comment P7-2:

The commenter asks if traffic from other projects outside of the Teal Club Specific Plan (such as Seabridge) was included in the traffic impact analysis since it could impact some, or all of the study intersections. If traffic from other projects outside of the Teal Club Specific Plan was not included in the traffic impact analysis, then how would outside traffic be accounted for by the conservative assumption described on page 3-129 of the Draft EIR?

The Draft EIR evaluated potential traffic impacts in Section 3.14 and included a copy of the traffic study in Appendix K of the EIR. The Opening Year (2020) traffic volumes (see Section VII.A on page 43 of the Traffic Impact Analysis Report (TIAR) were obtained from The Teal Club Specific Plan - EIR Traffic Impact Study (TIS) prepared by Stantec (May 2015). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project is not part of the Teal Club Specific Plan project that is currently being processed by the City. To provide a conservative analysis, the proposed project was manually added to the previous traffic volume forecasts from the May 2015 TIS. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the Oxnard Traffic Model (OTM). It should be noted that the OTM includes cumulative development (pending and approved) throughout the City of Oxnard including the proposed Seabridge Elementary School.

The Interim Year (2021) traffic volumes (see Section VIII.A on page 52 of the TIAR) were obtained from The Teal Club Specific Plan - EIR TIS prepared by Stantec (May 2015). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project is not part of the Teal Club Specific Plan project that is currently being processed by the City. To provide a conservative analysis, the proposed project was manually added to the previous traffic volume forecasts from the May 2015 TIS. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM. It should be noted that the OTM includes cumulative development (pending and approved) throughout the City of Oxnard including the proposed Seabridge Elementary School.

P8

From: Kim Hayashi [mailto:tkshayashi@yahoo.com]
Sent: Tuesday, January 15, 2013 11:00 PM
To: Fateh, David <dfateh@oxnardsd.org>
Cc: Kim Hayashi <tkshayashi@yahoo.com>
Subject: re: Teal Club Schools & District Office Plan

Dear Mr. Fateh,

I am appalled that the Oxnard School District Board would even consider a school being built adjacent to the Oxnard Airport! (The Teal Club Initiative)

The field north of Teal Club Road, bordered to the west by Patterson Road, to the north by Doris Road, and to the east by Ventura Road is in the flight path. Planes in the traffic pattern fly over the Cabrillo neighborhood heading east, then turn and land into the west.

The landing or takeoff are the critical parts of a flight, and if ANYTHING goes wrong, then the plane need an open space to crash should the engines fail. The touch and go pattern is on the north side of the airport (the Teal Club side!). The control tower is not even a quarter mile away from Teal Club Road! Accidents happen. It is NOT a matter of "IF", but "WHEN" a plane crash will occur!

The Heliplanner Report lists SIX significant aircraft accidents, but there ARE MORE documented accidents. (Yes, I was living in Cabrillo when a plane clipped the chimney of a house in the Cabrillo neighborhood, then ripped a wing off when it hit a cement light pole on Doris Ave, then crashed into the field. The wing landed on the street, and burst into flames.)

Fighter jets also made test flights at Oxnard Airport. Military jets have crashed and destroyed homes in the San Diego area; yes, this can happen here as well!

Putting an elementary school, a middle school and a district office in where this field is, is *willfully jeopardizing the safety of human lives*, especially the students. Have you forgotten WHY Oxnard High School was relocated to its current location on Gonzales Road, as the old one was in the flight path (and even further away from the airport than this proposed plan?)

The Heliplanner report/Caltrans aviation safety officer in the Draft E.I.R. recommended that "Oxnard School District look for a different site further away from airport runway." The Caltrans Division of Aeronautics Airport Land Use Planning Handbook mentions studies that schools should be avoided, discouraged, and are unacceptable, incompatible, etc. within the Traffic Pattern Zone (TPZ) of an airport.

The Department of Airports found the proposed school site to be "UNACCEPTABLE," and the Ventura County Airport Authority voted UNANIMOUSLY AGAINST both the Teal Club Specific Plan AND the schools.

And the traffic that this would create! UNACCEPTABLE in both volume AND LOCATION! What happened to Oxnard's plan of having an elementary school in the CENTER of a major block, solids living WITHIN THAT BLOCK could walk to school without having to cross a major street? Has Oxnard ditched this plan, as demonstrated by Sorin, and Thurgood Marshall?

We have SO MANY SCHOOLS ALREADY here in this area. Where are these students coming from? More busing/long bus rides for students are ridiculous. It would be far better use of our tax dollars to expand the existing schools where the student population warrants it. Add a second story if the present footprint doesn't allow single floor buildings.

BUILDING MORE SCHOOLS/District Offices IN THIS AREA, IN A FLIGHT ZONE ON A PARCEL OF LAND ADJACENT TO THE AIRPORT RUNWAY MAKES NO SENSE. IT IS JUST NOT SAFE; OSD IS GAMBLING WITH STUDENT, FACILITY AND STAFF LIVES. SCRAP THIS PLAN.

Kim Hayashi
 Oxnard, California

P8-1

P8-2

Letter P8	<p style="text-align: center;">Kim Hayashi Individual</p>
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Response to Comment P8-1:

Commenter is appalled that OSD would consider a school building adjacent to the Oxnard Airport (The Teal Club Initiative). Commenter is concerned about the proposed project's proximity to Oxnard Airport and potential safety risks. Comment states that there have been more than six significant aircraft accidents.

The Draft EIR addressed potential airport hazards in Section 3.8, including regulatory agencies' opposition to the proposed project location. The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. This summary notes that "There have been six significant accidents involving approaches or departures of aircraft inside the Oxnard Airport SOI and three outside the SOI, but nearby, since 1979." The AHLRA, prepared by Heliplanners, includes a table listing historical operations counts, and pages 9-11 detail historical significant accidents surrounding Oxnard Airport. As stated in the AHLRA: "For a historical perspective of safety at Oxnard Airport, we have reviewed its accident history. Airports sometimes experience on-airport incidents, such as hard landings, gear-up landings, taxiing accidents, etc. While these may damage aircraft or injure occupants, they do not affect off-airport land uses and are not considered significant in the context of this study. Consequently, we have not attempted to identify or record such incidents in this report." In terms of the August 1997 Cessna 210 accident involving a home on Ivanhoe, the AHLRA states that "Note this accident occurred right around the proposed project site." No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

The commenter referred to the proposed project as the "Teal Club Initiative." OSD would like to clarify that the proposed project is not part of the "Teal Club Specific Plan Project." The Teal Club Specific Plan Project is a separate project currently being processed by the City that includes the project site with a different development scenario.

Response to Comment P8-2:

Commenter is in opposition to the proposed project due to traffic volume and location of the school and would like to know where students would be coming from. Commenter suggested that better use of our tax dollars would be to expand existing schools where the student population warrants it.

There are five existing elementary/middle schools that currently accommodate OSD students in the vicinity of the Site as shown in current OSD attendance boundary maps for these five schools. Although some interdistrict student transfers may occur between the proposed schools and existing schools, the majority of students will travel to the project site from residential areas located west of Ventura Road.

The District has a Master Construct and Implementation Program and continues to make facilities upgrades at District schools as noted in Section 2.1 of the Draft EIR.

Response to Comment P8-3:

Commenter suggests the District "scrap this plan" due to safety concerns with the project location near the airport. The Draft EIR addressed potential airport hazards in Section 3.8. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised.

P9

726 Daffodil way. 1-16-18
Oxnard Ca. 93030
I Maria Tranco opposed
to the project that it is
propose to be builded
Elementary and ~~high school~~.
Jr-high schools.
Because of the big change
that will take place in our
neighbor. Traffic heavy - graffiti -
Delinquency among all that
feature tears that will take
place. I latally oppose to
this I hoping that my
voice and opinion will be
Heard. 805 9552809 Maria Tranco

P9-1

Letter P9	Maria Franco Individual
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Response to Comment P9-1:

Commenter provides comments in opposition to the proposed project due to the change in use, heavy traffic, graffiti, and delinquency among future teens. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P10

Oxnard CA 93030
January 15, 2018

Mr. David Fateh
Director of Facilities
1051 South A street
Oxnard CA 93030

Dear Mr. Fateh,

- I want to express serious concern about the safety of placing the Doris Patterson schools less than $\frac{1}{4}$ mile to the airport tower and $\frac{1}{4}$ mile to airport property. This site lies within the traffic control pattern zone for Oxnard airport. P10-1
1. The Ventura County Airport authority voted unanimously AGAINST this project. P10-2
 2. The Caltrans Aviation Safety Officer Mr. Daniel Gargas stated that the site "will experience numerous over-flights by aircraft" and recommended "the school district look for a different site further away from the airport runway". Furthermore, Mr. Gargas stated "Caltrans cannot guarantee the safety of this, or any site". He noted that this site "will experience numerous over-flights by aircraft". P10-3
 3. In the Caltrans Division of Aeronautics' Airport Land Use Planning Handbook, Appendix A references studies in which most consider schools to be "avoided", "discouraged", "conditionally permitted", "unacceptable", or "incompatible" within the traffic pattern zone or equivalent.
 4. The Ventura County Transportation Commission issued a comment letter regarding the proposed school site. Executive Director Mr. Darren Kettle argued that "The proposed project as defined would be inconsistent with the adopted CLUP." He stated that schools are specifically identified as "an unacceptable land use" within the TPZ. The letter specifies concern that locating another school with the TPZ places a large number of children at risk" in the event of an aircraft accident. P10-4
 5. In a letter commenting on the proposed school site Todd McNamee, Airport Manager stated the Department of Airports found the proposed school to be "unacceptable". P10-5
 6. Six significant aircraft accidents were listed in the Heliplanners report dated November 20, 2017 although there have been many other accidents associated with Oxnard Airport a Cessna 210 hit a home on Ivanhoe, sheared off a chimney and some roof tiles. Although Heliplanners report stated "none of this occurred around the proposed project site", neighbors in Cabrillo neighborhood stated that the house on Ivanhoe is directly across the street from the school site. P10-6
 7. In a letter dated January, 2018, Executive Director Mr. Darren Kettle cited that the likelihood of an accident at Oxnard Airport is once every 4.2 years and "the area with the traffic pattern zone is subject to a greater number of aircraft accidents than outside of the TPZ." Furthermore, Mr. Kettle states that the adopted CLUP gives priorities to "vulnerable occupants" of land use specifically seniors, the disabled, and children. P10-7
- The field in which the Doris Patterson schools would be located is subject to overflight by fixed wing and helicopter traffic. At a previous INCF meeting, it was noted that planes in the traffic pattern fly P10-8

over the Cabrillo neighborhood heading east, then turn and land into the west. The most critical parts of each flight are the takeoff and landing due to the low altitude and low airspeeds. If the engine fails during either of these 2 events, the plane will not be able to make the runway and have to perform an emergency landing. Planes in the touch and go pattern need a clearing to crash land should their engines fail. This is critical for a single engine airplane. Since they are fairly low in altitude their glide range is not far enough to take them back to the airport. The touch and go pattern is on the north side of the airport, the Teal Club side. Taking away that open area leaves fewer options for a crash landing.

Review of the NTSB database of total "incidents" for all of City of Oxnard show that there have been 25 incidents, some of those around the airport. One occurred in October 2014, and another May 2006 when a plane struck a vehicle on Victoria Ave. In August 2008 a plane lost power on approach and struck a baseball backstop. The most notable was August 1997 when a plane clipped a roof on Ivanhoe and landed in a lima bean field.

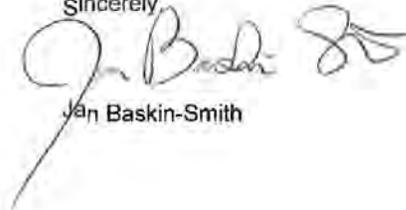
In 2016 there were approximately 75,000 takeoffs and landings at Oxnard airport and the control tower was in communication with an additional 15,000 passing through the airspace.

If we hypothesize that the average lifetime of an Oxnard elementary school is 50 years and an aircraft accident occurs on average every 4.2 years, schools within the Traffic Pattern Zone of Oxnard Airport are at greater risk of an accident occurring. For Heliplanners to calculate the probability is once every 462 years is disingenuous.

Oxnard airport cannot be closed due to FAA grant money. The safest alternative is to move the Doris Patterson schools as far away from the airport as possible.

To do otherwise places 1900 childrens' lives in jeopardy.

Sincerely

A handwritten signature in black ink, appearing to read "Jan Baskin-Smith", with a long, sweeping underline that extends to the left.

Jan Baskin-Smith

P10-8

11/16/2017

2 Men Seriously Hurt When Plane Crashes Into Field - latimes

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Three Killed When Small Plane Crashes
January 1, 2006

Planes Collide Near Seattle; Two Killed
August 5, 2005

Plane Crash Into Home Appears Deliberate
August 27, 2001

Military Plane Crash Kills All 34 Aboard
May 17, 2001

2 Men Seriously Hurt When Plane Crashes Into Field

Aviation: A third man receives minor injuries after the single-prop Cessna, on an instructional flight, fails to make an emergency landing at Oxnard Airport.

August 23, 1997 | DAWN HOBBS and SCOTT HADLY | SPECIAL TO THE TIMES

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OXNARD — Two men suffered lacerations and broken bones when their single-propeller Cessna clipped a house and crashed into a lima bean field Friday afternoon as they attempted an emergency landing at the Oxnard Airport.

A third man suffered minor injuries.

"We were talking in the living room and playing Nintendo, then we heard this big boom and the house shook like a big earthquake," said Julie Plascencia, 14, who was in the two-story beige home. "I was too scared to think about what it was."

The plane, on an instructional flight out of Camarillo Airport, apparently suffered engine failure before it sheared off the top of a chimney and some red roof tiles on the house on Ivanhoe Avenue about 2:30 p.m.

The Cessna 210 then slammed into a cement light pole across the street on Doris Avenue, ripping off a wing and crashing into the bean field just steps away from farm workers. The wing left behind in the street burst into flames and unleashed a black column of smoke.

Shirley Clark was watering plants in her backyard on Nottingham Drive when she spotted the plane gliding suspiciously quiet—just above rooftop level.

"I did not hear a motor but the prop was turning," Clark said.

Then she saw fear on the pilot's face.

"The expression on the man was frightening," she said. "Obviously he had lost power. I give the man credit for trying to get the plane into an open field."

By the time Oxnard firefighters arrived, one of the men was standing next to the wreckage, said Fire Department Battalion Chief Terry McAnally. The man seemed to have escaped serious injury.

Two other men were trapped beneath the plane. One was lying under the wing, and firefighters were able to pull him out. The other was pinned under the left side, paramedics and firefighters said. Both suffered broken ankles and serious lacerations.

All three were taken to St. John's Regional Medical Center.

"Everybody is conscious. Everybody is talking," said Lynn Borman, a paramedic supervisor with Gold Coast Ambulance Company.

Hospital officials identified the men as 34-year-old Michael Macias, a certified flight instructor with Sun-Air Aviation Inc. in Camarillo, and Beat Leu, 33, and Markus Vogel, 41, both of Switzerland. All three were listed in fair condition, a hospital spokeswoman said.

"It was a clear day. It's hard to say what happened," McAnally said. "There was no report of any landing gear down. They hit the roof, the pole and then tore off the wing. They're lucky they got away from it . . . if lucky is the word."

Tad Dougherty, manager of the Oxnard Airport, said the pilot tried at the last minute to avoid the homes.

"He probably saved somebody," Dougherty said. "An experienced pilot will do everything he can to land the plane in a vacant field. He doesn't want to hit the house because he will injure himself as well as anybody in the house."

Residents in the nearby housing tract said that although they live near the Oxnard Airport they had never feared crashes before.

<http://articles.latimes.com/1997/aug/23/local/me-25209>

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11/16/2017

2 Men Seriously Hurt When Plane Crashes Into Field - latimes

"When we first came to look at the house we questioned the developer here about the planes," said Gail Johnson, who lives across the street from the home clipped by the plane. "We were told we were not in a flight path."

Crash investigators with the Federal Aviation Administration and the National Transportation Safety Board arrived about two hours after the accident to scrutinize the wreckage.

Investigators said it would be at least a day before they could determine a cause for the accident, said Brian Ashton, an FAA official at the scene.

Air traffic controllers at Point Mugu Naval Air Station reported receiving a distress call from the pilot about 2:30. The Cessna had lost power and was at an altitude of about 1,300 feet and falling, said Phyllis Thrower, a Navy spokeswoman.

The plane was bound for Burbank but developed trouble about two miles from the Oxnard Airport, Thrower said.

A representative at Sun-Air declined comment.

An instructor at another flight school at the Camarillo Airport said Sun-Air operates a Cessna 210 with the matching tail number.

Hadly is a staff writer and Hobbs is a correspondent. Times staff writer Hilary MacGregor and correspondents Nick Green and David Greenberg contributed to this story.

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(Estimated) Report Publish Date(s)	Report(s)	Event Date	Location	Make/Model	Registration Number	NTSB No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)
Factual 03/28/2017 Final 04/04/2017	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	10/29/2014	Oxnard, CA	HAWKER AIRCRAFT LTD HAWKER HUNTER MK.58	N332AX	WPR15GA030	Fatal(1)	
Factual 11/19/2014 Final 12/10/2014	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	06/29/2013	Oxnard, CA	AYERS LESS DRAG SPECIAL	N130LD	WPR13FA298	Fatal(2)	
Factual 03/27/2009 Final 05/12/2009	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	08/09/2008	Oxnard, CA	Smith Stewart S51D	N51VS	LAX08LA263	Nonfatal	
Factual 04/03/2008 Final 04/30/2008	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	03/11/2008	Oxnard, CA	Bell 206B	N7028J	SEA08CA091	Nonfatal	
Factual 07/13/2007 Final 07/25/2007	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	05/26/2006	Oxnard, CA	Piper PA-28-151	N4596X	LAX06LA183	Nonfatal	

https://www.nts.gov/_layouts/ntsb.aviation/Results.aspx?queryId=185dc45f-f424-42ba-86ca-5f66b4c09225

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11/16/2017

Aviation Results

(Estimated) Report Publish Date(s)	Report(s)	Event Date	Location	Make/Model	Registration Number	NTSB No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)
Factual 06/17/2005 Final 09/13/2005	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	05/20/2005	Oxnard, CA	Piper PA-28-181	N8460N	LAX05CA182	Nonfatal	
Factual 07/30/2007 Final 09/14/2007	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	03/07/2005	Oxnard, CA	Cessna 210L	N2044S	LAX05FA108	Nonfatal	
Factual 12/01/2005 Final 02/28/2006	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	11/09/2004	Oxnard, CA	American Eurocopter AS350-BA	N655TV	LAX05LA020	Nonfatal	
Factual 01/26/2005 Final 03/30/2005	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	12/27/2003	Oxnard, CA	Bellanca 7ECA	N53879	LAX04LA079	Nonfatal	
Factual 08/06/2004 Final 09/29/2004	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	09/08/2002	OXNARD, CA	Lockamy SONEX	N164JL	LAX02LA279	Nonfatal	

NOTES:

- On Jan. 8, 2001, dynamic access to the accident data repository was implemented. Static files are no longer available.
- On Oct. 2, 2001, minor cases which do not fall under the definition of "accident" or "incident" were removed from the database; these entries were previously identified with "SA" in the accident number.
- On Sept. 18, 2002, data from 1962-1982 were added to the aviation accident information. The format and type of data contained in the earlier briefs may differ from later reports.

** - Do not use these fields as selection parameters if your date range includes pre-1982 dates, as they did not exist prior to 1982 and their use may falsely limit the data returned.

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(Estimated) Report Publish Date(s)	Report(s)	Event Date	Location	Make/Model	Registration Number	NTSB No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)	
Factual 11/03/2001 Final 11/28/2001	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	04/22/2001	OXNARD, CA	Piper PA-22-135	N75343	LAX01LA154	Nonfatal		
Factual 10/21/2002 Final 12/06/2002	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	11/16/2000	Oxnard, CA	Cessna 210K	N8118G	LAX01LA043	Nonfatal		
Factual 04/27/2001 Final 12/14/2001	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	12/26/1999	OXNARD, CA	Champion 7ECA	N8395V	LAX00LA056	Nonfatal		
Factual 08/03/1998 Final 02/15/2001	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	01/30/1998	OXNARD, CA	Robinson R22	N2308X	LAX98LA083	Nonfatal		
Factual 04/06/1999 Final 02/29/2000	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	08/22/1997	OXNARD, CA	Cessna 210E	N1808F	LAX97LA299	Nonfatal		

https://www.nts.gov/_layouts/nts.aviation/Results.aspx?queryId=185dc45f-f424-42ba-86ce-5f66b4c09225

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1 2 3			Page size: 10		25 items in 3 pages			
(Estimated) Report Publish Date(s)	Report(s)	Event Date	Location	Make/Model	Registration Number	N15B No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)
Factual 08/04/1997 Final 09/30/1997	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	09/07/1996	OXNARD, CA	Piper PA-28R-200	N41331	LAX96LA331	Nonfatal	
Factual 10/15/1996 Final 11/11/1996	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	11/18/1995	OXNARD, CA	Beech S35	N5795K	LAX96FA049	Fatal(1)	
Factual 03/23/1995 Final 10/13/1995	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	12/07/1994	OXNARD, CA	PIPER PA-23	N2027P	LAX95LA045	Nonfatal	
Final 12/16/1993	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	04/21/1992	OXNARD, CA	PIPER PA-22-150	N6907D	LAX92LA182	Nonfatal	
Final 01/22/1991	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	01/05/1989	OXNARD, CA	CESSNA 172M	N61587	LAX89FA091	Fatal(1)	

NOTES:

- On Jan. 8, 2001, dynamic access to the accident data repository was implemented. Static files are no longer available.
- On Oct 2, 2001, minor cases which do not fall under the definition of "accident" or "incident" were removed from the database; these entries were previously identified with "SA" in the accident number.
- On Sept. 18, 2002, data from 1962-1982 were added to the aviation accident information. The format and type of data contained in the earlier briefs may differ from later reports.

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1 2 3			Page size: 10		25 items in 3 pages			
(Estimated) Report Publish Date(s)	Report(s)	Event Date	Location	Make/Model	Registration Number	NTSB No.	Event Severity	Type of Air Carrier Operation and Carrier Name (Doing Business As)
Final 02/24/1989	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	06/02/1987	OXNARD, CA	CESSNA 152	N7320A	LAX87LA223	Nonfatal	
Factual 02/06/1995	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	12/13/1985	OXNARD, CA	CESSNA 150	N7310X	LAX86FA066	Fatal(1)	
Factual 11/30/2000	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	11/25/1984	OXNARD, CA	PENNINGTON-EAA BIPLANE P2P	N54JP	LAX85LA049	Nonfatal	
Factual 02/06/1995	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	01/18/1984	OXNARD, CA	PIPER PA-32-300	N4012R	LAX84FA144	Nonfatal	
Final 03/22/1983	Final Report (PDF) Synopsis (HTML) Data Summary (PDF)	03/22/1982	OXNARD, CA	CESSNA 150M	N63331	LAX82FUQ12	Fatal(1)	
1 2 3			Page size: 10		25 items in 3 pages			

https://www.nts.gov/_layouts/ntsb.aviation/Results.aspx?queryId=185dc45f-4424-42ba-86ce-5f68b4c09225

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11/16/2017

WPR15GA030

NTSB Identification: WPR15GA030

14 CFR Public Aircraft

Accident occurred Wednesday, October 29, 2014 in Oxnard, CA
 Probable Cause Approval Date: 04/04/2017
 Aircraft: HAWKER AIRCRAFT LTD HAWKER HUNTER MK.59, registration: N332AX
 Injuries: 1 Fatal.

: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this public aircraft accident report.

The airline transport pilot was flying the single-seat turbojet airplane, which was owned and operated by a private company under contract to the United States Navy. The accident airplane was one of a flight of two airplanes that were returning to the airport to land at the conclusion of a training exercise. The accident airplane was to follow the lead airplane in an "overhead break" maneuver, which included overflying the runway, entering a descending, 270-degree turn to enter the downwind leg of the traffic pattern, then subsequently entering a descending, 180-degree turn to final approach. The recommended final approach airspeed was 150 knots (kts).

Witnesses observed both airplanes during the approach, and noted that the accident airplane's approach appeared lower and slower than that of the lead airplane. They stated that they observed the accident airplane in a left-wing-low bank, the wings rocked from side to side, then the airplane entered a rapid roll to the right and pitched down until it impacted the ground.

Recorded data recovered from the airplane's primary flight display unit revealed that the airplane crossed the runway's extended centerline about 5,900 ft from the runway threshold in a 30-degree bank at an airspeed about 126 kts. At this time, the airplane was on a magnetic heading about 25 degrees from runway alignment, at an altitude of about 328 ft; field elevation was 13 ft. Although the airspeed was well below the target airspeed, the airplane was on a heading, and in a geographic location, that permitted capture of the final approach path with bank corrections. Stall onset occurred several seconds later when the airplane was at a bank angle of 45 degrees, an airspeed of 114 kts, and an altitude of 278 ft. Data indicated that the pilot did not increase thrust significantly in the approach until at, or possibly about 1 second before, stall onset.

The stall was the result of the combination of an airspeed that was 46 knots below the minimum target value, and a bank angle that was significantly more than that required to capture the final approach path. Examination of the engine and flight controls did not reveal any mechanical deficiencies that would have adversely affected the performance or controllability of the airplane before impact.

The on-scene investigation revealed that the pilot did not attempt to eject from the airplane. Naval Air Systems Command simulations determined that a successful ejection could have been accomplished as late as 2 seconds before the end of the data (the data ended several seconds before impact).

The National Transportation Safety Board determines the probable cause(s) of this accident as follows:

- The pilot's failure to maintain adequate airspeed during the approach for landing, which resulted in the airplane exceeding its critical angle of attack and experiencing an aerodynamic stall/spin at an altitude too low for recovery.

Full narrative available

Index for October 2014

https://www.nts.gov/_layouts/ntsb.aviation/brief.aspx?ev_id=20141029X13346

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11/16/2017

2 who died in Oxnard plane crash were experienced pilots

SECTIONS

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SUBSCRIPTION

NEWS

2 who died in Oxnard plane crash were experienced pilots



Two people died Saturday when a small plane crashed in Oxnard.



James Ayers, 67 of Newbury Park, died when his home-built plane crashed in an Oxnard field Saturday.



Donald 'Craig' Tempelton, 54 of Agoura Hills, died when the home-built plane he was in crashed in an Oxnard field Saturday.

By Cindy Von Quednow of the Ventura County Star

Posted: July 01, 2013

0 f t e

Two men who died when a home-built plane crashed in an Oxnard field Saturday were plane aficionados who had flown for years, relatives said Monday.

James Ayers, 67, of Newbury Park, and Donald "Craig" Tempelton, 54, of Agoura Hills, were flying in Ayers' plane when it went down for unknown reasons. Authorities used dental records to confirm their identities, which were released Monday.

Neither victim's wife knew her husband would be flying Saturday.

Ayers' wife, Kathy, said he built the single-engine plane about two years ago. Ayers, president of the Experimental Aircraft Association in Oxnard, had flown to cities in California and participated in air shows in Wisconsin and Florida.

<http://archive.vcstar.com/news/2-who-died-in-oxnard-plane-crash-were-experienced-pilots-ep-292590428-351671021.html/>

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11/16/2017

2 who died in Oxnard plane crash were experienced pilots

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Local News & Events in Ventura



57°



SUBSCRIPTION

She said he loved airplanes and had built model planes since he was 6. He sold plane parts from his home after he retired as a mechanical engineer.

The two met in Santa Monica and had been married for 43 years. Their anniversary was coming up on July 10. The couple have a daughter who recently moved back home from Florida and four grandchildren.

Ayers was well-known at the Oxnard Airport, where he went every day and helped others build planes, his wife said.

She said she used to be scared to fly with him but mustered the courage to do it. They took trips to Santa Maria, Big Bear and Bakersfield last year.

She said she was shocked to hear the news of her husband's death and that all his friends at the airport were saddened.

The plane crashed in an agricultural field north of Wooley Road between Harbor Boulevard and Victoria Avenue, soon after it left the Oxnard Airport about 12:10 p.m.

Witnesses said the plane appeared to have engine problems before it went down, officials said. One witness said he saw the plane up high and could hear the engine cut out. After that, the plane went straight down, and numerous people reported an explosion after the crash, officials said.

The plane was a single-engine, home-built model identified as a Less Drag Special, according to the Federal Aviation Administration. Ayers' business was named Less Drag Products.

The plane was registered to Ayers and based out of the Oxnard Airport. It had two seats with a single engine and was described as a 260-horsepower Lycoming. The aircraft was built out of other experimental planes' parts, Harmon Rocket II parts and homemade parts, according to Homebuiltdirectory.com.

Jorge Rubio, Oxnard Airport's manager, said Ayers founded and was president of the Experimental Aircraft Association chapter there.

<https://archive.untel.com/news/2017/11/16/2-who-died-in-oxnard-plane-crash-were-experienced-pilots-ventura-county-star/>

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11/16/2017

Aircraft Accidents and Incidents - Oxnard, California 93030 Oxnard Airport Saturday, December 27, 2003 9:24 PST

N Number Lookup

Individually Owned: Corporate Owned:

Oxnard Airport Aircraft Accident/Incident Report

Oxnard, California 93030
Saturday, December 27, 2003 9:24 PST

NTSB Narrative Summary Released at Completion of Accident

The airplane ground looped during the landing roll. After touchdown, the pilot applied right rudder and the pedal became stuck in a near full forward position. The pilot was then unable to maintain directional control and the airplane turned approximately 270 degrees on the runway and came to rest. A post accident inspection revealed that the pin that secured the right rudder pedal to the brake cylinder arm was missing. There was also evidence of aluminum shavings at the pin attachment point. An identical problem was discovered by the operator on the sister ship to the accident airplane. The pin on the sister ship was changed a few weeks before the accident. The operator intended to examine the rudder pedal pins on the accident airplane in the next scheduled maintenance period. The manufacturer of the airplane indicated that the pin can be installed either outboard or inboard of the cotter key. As depicted in Figure 26 of the Parts Manual, the installation of the pin is depicted as inboard of the cotter key. In this model of the airplane, the battery is located in the forward section of the fuselage and a structural angle brace is installed for support. On the right pedal of the forward seat, the clearance between the pin and the angle brace is reduced with the angle brace in the design location if the pin is installed inboard of the cotter key. If the pin is installed outboard of the cotter key, it allows for greater clearance between the pin and the angle brace.

NTSB Probable Cause Narrative

the failure of the pin that secured the right rudder pedal to the brake cylinder arm due to improper installation of the pin. Also causal was the manufacturer's confusing maintenance instructions regarding the installation of the right rudder pedal pin and cotter key.

Event Information

Filter

Type of Event	Accident
Event Date	12/27/2003
Event Day of the Week	Saturday
Time of Event	924
Event Time Zone	Pacific Standard Time
Event City	Oxnard
Event State	CALIFORNIA
Event Country	--
Zipcode of the event site	93030
Event Date Year	2003
Event Date Month	12
MidAir Collision Indicator	No
On Ground Collision occurred ?	No
Event Location Latitude	341200N
Event Location Longitude	1191200W

<https://www.aircraftone.com/aircraft/accidents/20031230x02102.asp>

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11/16/2017

Aircraft Accidents and Incidents - Oxnard, California 93030 Oxnard Airport Saturday, December 27, 2003 9:24 PST

Event Location Airport	Oxnard
Event Location Nearest Airport ID	OXR
Indicates whether the acc/inc occurred off or on an airport	On Airport
Distance from airport in statute miles	--
Degrees magnetic from airport	--
Airport Elevation	43
Weather Briefing Completeness	Not pertinent
Investigator's weather source	Weather Observation Facility
Time of the weather observation	951 Pacific Standard Time
Direction of event from weather observation facility (degrees)	--
Weather Observation Facility ID	oxr
Elevation of weather observation facility	43
Distance of event from weather observation facility (units?)	--
Time Zone of the weather observation	PST
Lighting Conditions	Day
Lowest Ceiling Height	--
Lowest Non-Ceiling Height	--
Sky/Lowest/Cloud Conditions	Clear
Sky Condition for Lowest Ceiling	None
Visibility Runway Visual Range (Feet)	--
Visibility Runway Visual Value (Statute Miles)	--
Visibility (Statute Miles)	10
Air Temperature at event time (In degrees celsius)	11
Dew Point at event time (In degrees fahrenheit)	-3
Wind Direction (degrees magnetic)	20
Variable Wind Indicator	Wind direction could be determined
Wind Speed (knots)	7
Wind Velocity Indicator	--
Wind Gust Indicator	Gusting
Wind Gust (knots)	0
Altimeter Setting at event time (In. Hg)	30.43
Density Altitude (feet)	--
Intensity of Precipitation	--
METAR weather report	--
Event Highest Injury	None
On Ground, Fatal Injuries	--
On Ground, Minor Injuries	--
On Ground, Serious Injuries	--
Injury Total Fatal	--

<https://www.aircraftone.com/aircraft/accidents/20031230x02102.asp>

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11/16/2017

Aircraft Accidents and Incidents - Oxnard, California 93030 Oxnard Airport Friday, January 30, 1998 16:19 PST

N Number Lookup Q Individually Owned: Corporate Owned:

Oxnard Airport Aircraft Accident/Incident Report

**Oxnard, California 93030
Friday, January 30, 1998 16:19 PST**

NTSB Narrative Summary Released at Completion of Accident

The pilot reported that he was doing touch-and-go landings to the dirt taxiway. The helicopter touched down hard and the left skid got stuck in the mud. The pilot then attempted to liftoff, but the helicopter rolled onto its left side and he 'couldn't recover from dynamic rollover.'

NTSB Probable Cause Narrative

The pilot's improper use of the collective during the initiation of the rollover, which prevented the recovery from the condition.

Event Information

Filter

Type of Event	Accident
Event Date	1/30/1998
Event Day of the Week	Friday
Time of Event	1819
Event Time Zone	Pacific Standard Time
Event City	OXNARD
Event State	CALIFORNIA
Event Country	--
Zipcode of the event site	93030
Event Date Year	1998
Event Date Month	1
MidAir Collision Indicator	No
On Ground Collision occurred ?	No
Event Location Latitude	
Event Location Longitude	
Event Location Airport	OXNARD
Event Location Nearest Airport ID	OXR
Indicates whether the acc/inc occurred off or on an airport	On Airport
Distance from airport in statute miles	--

<https://www.aircraftone.com/aircraft/accidents/20001211x09473.asp>

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Aircraft Accidents and Incidents - Oxnard, California 93030 Oxnard Airport Friday, January 30, 1998 16:19 PST

Degrees magnetic from airport	--
Airport Elevation	43
Weather Briefing Completeness	Not pertinent
Investigator's weather source	Weather Observation Facility
Time of the weather observation	1619 Pacific Standard Time
Direction of event from weather observation facility (degrees)	0
Weather Observation Facility ID	OXR
Elevation of weather observation facility	43
Distance of event from weather observation facility (units?)	0
Time Zone of the weather observation	PST
Lighting Conditions	Day
Lowest Ceiling Height	0
Lowest Non-Ceiling Height	0
Sky/Lowest/Cloud Conditions	Clear
Sky Condition for Lowest Ceiling	None
Visibility Runway Visual Range (Feet)	0
Visibility Runway Visual Value (Statute Miles)	0
Visibility (Statute Miles)	20
Air Temperature at event time (In degrees celsius)	16
Dew Point at event time (In degrees fahrenheit)	9
Wind Direction (degrees magnetic)	160
Variable Wind Indicator	Unknown
Wind Speed (knots)	5
Wind Velocity Indicator	Unknown
Wind Gust Indicator	Not Gusting
Wind Gust (knots)	0
Altimeter Setting at event time (In. Hg)	29
Density Altitude (feet)	--
Intensity of Precipitation	Unknown
METAR weather report	--
Event Highest Injury	None
On Ground, Fatal Injuries	0
On Ground, Minor Injuries	0
On Ground, Serious Injuries	0
Injury Total Fatal	--
Injury Total Minor	--
Injury Total None	2
Injury Total Serious	--
Injury Total All	--

<https://www.aircraftone.com/aircraft/accidents/20001211x09473.asp>

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11/16/2017

Aircraft Accidents and Incidents - Oxnard, California 93030 Oxnard Airport Friday, January 30, 1998 16:19 PST

Investigating Agency	NTSB
NTSB Docket Number (Internal use)	219
NTSB Notification Source	--
NTSB Notification Date	Jan 30 1998 12:00AM
NTSB Notification Time	1745
Fiche Number and/or location -used to find docket information	IMAGE
Date of most recent change to record	Feb 16 2001 11:56AM
User who most recently changed record	dbo
Basic weather conditions	Visual Meteorological Cond
FAA District Office	--

Aircraft Involved

	Aircraft #1
Aircraft Registration Number	N2308X
NTSB Number	LAX98LA083
Missing Aircraft Indicator	N
Federal Aviation Reg. Part	Part 91: General Aviation
Type of Flight Plan filed	None
Flight plan Was Activated?	--
Damage	Substantial
Aircraft Fire	None
Aircraft Explosion	None
Aircraft Manufacturer's Full Name	Robinson
Aircraft Model	R22
Aircraft Series Identifier	R22
Aircraft Serial Number	1963
Certified Max Gross Weight	1370
Aircraft Category	Helicopter
Aircraft Registration Class	U.S. Registered/U.S. Soil
Aircraft is a homebuilt?	No
Flight Crew Seats	--
Cabin Crew Seats	--
Passenger Seats	--
Total number of seats on the aircraft	2
Number of Engines	1
Fixed gear or retractable gear	Fixed
Aircraft, Type of Last Inspection	100 Hour

<https://www.aircraftone.com/aircraft/accidents/20001211x09473.asp>

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NEWS

Pilot dies as banner-towing plane crashes in Camarillo



A Ventura County firefighter stands next to the wreckage of a Piper PA-18 Super Cub that crashed about 9:30 a.m. Sunday at Camarillo Airport. The pilot, Marc Fiorini, 53, was killed.

Posted: Sept. 01, 2008

[0 Comments](#)

[SHARE](#)



A man stands near the crashed advertising banner plane, which was owned by Florida-based Van Wagner Aerial Media LLC.



Firefighters help with the removal of an ultralight aircraft that crashed in a field adjacent to Camarillo Airport about 4 p.m. Sunday. No injuries were reported.

Piper PA-18 Super Cub noses over at the end of airport's runway

By Anna Bakalis

Aug. 9, 2008: A Los Angeles man is injured when the World War II-replica kit plane he is flying loses power during its approach to Oxnard Airport, smashing through a 40-foot-high baseball backstop and crashing into a bus barn.

July 10, 2008: The pilot of a single-engine aircraft towing an advertising banner walks away unscathed after his aircraft flips in a Camarillo industrial park after it hits a mound of dirt during an emergency landing.

helicopter crashes north of Somis during an inspection of power lines.

July 1, 2006: Two members of a Santa Barbara family are killed and two others are injured when their single-engine plane crashes into a drainage ditch near a lemon grove in Somis.

May 27, 2006: A woman and a 2-year-old girl are injured when the sport utility vehicle in which they are riding on Victoria Avenue is struck by a plane whose pilot is attempting to make an emergency landing at Oxnard Airport. The pilot is also injured.

April 20, 2002: Two crew members are killed when their Navy QF-4 Phantom II jet crashes during a landing maneuver at the Point Mugu Air Show. No one on the ground is injured.

Jan. 31, 2000: Alaska Airlines Flight 261 crashes near Anacapa Island, killing the 83 passengers and five crew members on board.

Feb. 13, 1991: A pilot and passenger are killed when their small stunt plane collides with a helicopter piloted by cartoon voice artist Noel Blanc, son of

July 9, 2008: A single-engine plane lands upside-down on a hillside above a farm near Moorpark, causing minor injuries to the pilot and his passenger.

July 2, 2008: A Pacoima man is killed when the Cessna 152 airplane he is piloting crashes into a dirt embankment in a citrus orchard south of Fillmore.

Feb. 8, 2008: A twin-engine airplane crashes in a palm tree nursery west of Piru, and three people onboard are treated for minor injuries.

Sept. 4, 2007: A student pilot and his instructor suffer serious injuries when the single-engine plane they are flying goes down near a runway at Santa Paula Airport.

July 15, 2007: A Thousand Oaks man is killed when the vintage P-51D Mustang he is piloting flips near a runway at Camarillo Airport during landing.

April 24, 2007: A vintage T-28 Trojan Fennec makes a belly landing on the sand at Mandalay Beach Park in Oxnard. No one is injured.

Sept. 6, 2006: Two Southern California Edison employees die when their

Mel Blanc, near Santa Paula Airport. Blanc and his passenger, actor Kirk Douglas, are injured.

— *From staff reports*

A pilot died after the advertising banner plane he was flying crashed at Camarillo Airport on Sunday morning, according to the Federal Aviation Administration and local officials.

It was the second crash involving a banner-carrying plane in Ventura County in less than two months. Both crashes involved the same Piper planes owned by Van Wagner Aerial Media LLC.

The pilot was pronounced dead at the scene around 9:30 a.m., said Ventura County Sheriff's Department Capt. Frank O'Hanlon.

He was identified as Marc Fiorini, 53, who has ties to Florida, New Orleans and Mesa, Ariz., according to James Bernath of the Ventura County Medical Examiner-Coroner's Office. An autopsy was scheduled today.

"He was maneuvering to pick up the banner when for unknown causes, the

plane impacted the ground," O'Hanlon said.

The pilot of the Piper Super Cub was "trying to pick up an aerial advertising banner ... when the plane nosed over at the end" of the runway, Federal Aviation Administration spokesman Ian Gregor said in a statement. "Unfortunately, the pilot died."

The plane crash is being investigated by the FAA, and the National Transportation Safety Board is aware of the crash.

Under FAA rules, planes towing banners are barred from carrying passengers. No one was injured on the ground.

According to FAA records, the plane is a Piper PA-18 Super Cub built in 1957. It is registered to Van Wagner, which operates out of Camarillo Airport but has headquarters in Hollywood, Fla.

"This is a very tragic day in our company's history. We're just trying to get through," said Brian Broderson, vice president of Van Wagner, one of the leading aerial advertising businesses in the country.

The Piper plane was modified for carrying banners, said Capt. Pete Jensen of the Ventura County Fire Department.

Jensen said there was no fire but a small fuel leak brought out the hazardous materials team. Dozens of emergency responders in nine units responded to the crash, including an air squad helicopter, two fire engines, an ambulance and a ladder truck. The scene was mostly cleared by 3 p.m.

The single-engine fixed-wing plane crashed on the infield area to the east of the airport on the grass, where planes pick up the banners. The plane crashed nose-first with its tail in the air. The banner was still connected to the plane, and police tape surrounded the crash site, within view of Las Posas Road.

Later, around 4 p.m., an ultralight aircraft made an emergency landing in a nearby field west of Camarillo Airport, near Wood and Pleasant Valley roads. No injuries were reported.

According to NTSB records, about 11 banner planes have crashed in California since 1983, with three fatalities. In 2007,

195 airplane accidents occurred in California, according to NTSB records.

Camarillo Airport Manager Aaron Walsh said after the July crash that Van Wagner hires its own pilots, operates under an airport activity permit and pays rent to the airport for aircraft storage.

"They're their own business. We just collect the rent," Walsh said. "They've been a good tenant here with us."

A pilot can either take off with a banner already in tow, or can take off and then snag a banner resting on the ground, according to FAA rules for banner towing. The FAA requires the operator of a banner plane to apply for a certification of waiver and provide a list of its pilots certified to fly banner planes.

Bob Young and Felicia Ciano of Los Angeles saw the mangled plane near the runway as they were landing their small plane around 10 a.m.

"You could just tell when we were flying over that it was pretty bad," Ciano said, sitting at the Way-Point Cafe.

"I didn't want to look that close."

Letter P10	Jan Baskin-Smith Individual
-------------------	--

Response to Comment P10-1:

Comment in opposition to the proposed project due to proximity to the airport. The Draft EIR addressed potential airport hazards in Section 3.8. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-2:

Comment notes Ventura County Airport Authority opposition to the proposed project. The Draft EIR addressed potential airport hazards in Section 3.8. As discussed in the Draft EIR, Section 3.8.2.3: "The County of Ventura Department of Airports also found the school site to be unacceptable as proposed, referencing CLUP considerations, noise, and safety (August 8, 2014). Should the School District choose to pursue the site, the Department of Airports requests that an aviation easement be granted as a condition of development. They requested that the easement require parent notification of proximity to the airport and the associated traffic pattern, noise, and safety hazards therein. OSD is tentatively agreeable to granting such an easement subject to the District's formal legal review and concurrence." No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-3:

Comment notes Caltrans recommendations for a different site further away from the airport. The Draft EIR addressed potential airport hazards in Section 3.8. As discussed in the Draft EIR, Section 3.8.2.3: "The project site does not lie within the areas addressed by planning standards published by the FAA in its Airport Design advisory circular. Caltrans Aeronautics Division recommended exploring other sites further from the runway, but does not recommend against the proposed site based on their evaluation of existing conditions. The California Airport Land Use Planning Handbook discourages schools within the Traffic Pattern Zone, but does not prohibit them. The handbook's recommendations within specific zones are not meant to override local Airport Land Use Commission findings." No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-4:

Comment notes Ventura County Transportation Commission commenting that the proposed project would be inconsistent with the adopted CLUP. The Draft EIR addressed potential airport hazards in Section 3.8. As discussed in the Draft EIR, Section 3.8.2.3: "The project site lies within the Traffic Pattern Zone (TPZ) defined by the CLUP. According to the CLUP adopted land use compatibility standards in safety zones for civilian airports (CLUP Table 6B), schools are an unacceptable use in the TPZ. The VCTC, acting as the Airport Land Use Commission for Ventura County has the responsibility of making an official finding of consistency or inconsistency. In a letter addressed to Caltrans Division of Aeronautics, dated July 23, 2014, the VCTC found the proposed project to be inconsistent with the CLUP, and stated concerns related to the students' safety in the event of an aircraft accident on-site." No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-5:

Comment notes Caltrans recommendations for a different site further away from the airport. The Draft EIR addressed potential airport hazards in Section 3.8. See Response to Comments 22-2. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-6:

Comment states that there have been more than six significant aircraft accidents and that one was directly across the street from the project site. The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. This summary notes that “There have been six significant accidents involving approaches or departures of aircraft inside the Oxnard Airport SOI and three outside the SOI, but nearby, since 1979.” The AHLRA, prepared by Heliplanners, includes a table listing historical operations counts, and pages 9-11 detail historical significant accidents surrounding Oxnard Airport. As stated in the AHLRA: “For a historical perspective of safety at Oxnard Airport, we have reviewed its accident history. Airports sometimes experience on-airport incidents, such as hard landings, gear-up landings, taxiing accidents, etc. While these may damage aircraft or injure occupants, they do not affect off-airport land uses and are not considered significant in the context of this study. Consequently, we have not attempted to identify or record such incidents in this report.” In terms of the August 1997 Cessna 210 accident involving a home on Ivanhoe, the AHLRA states that “Note this accident occurred right around the proposed project site.” No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-7:

Comment notes that Executive Director Darren Kettle stated that the likelihood of an accident at Oxnard Airport is once every 4.2 years and the adopted CLUP gives priorities to “vulnerable occupants” of land use specifically senior, the disabled, and children.

The estimated occurrence every 462 years discussed in the Draft EIR refers to the accident risk at the project site as opposed to within the Oxnard Airport Sphere of Influence (SOI). The AHLRA includes calculations for both areas on pages 10 - 12 of the report (Appendix I of the Draft EIR). The calculations show an accident is likely to happen within the airport SOI on an average of once every 4.2 years. However, the project site comprises a small amount of the overall area included within the SOI. All potential accidents would not be expected to occur in one place within the SOI. It is stressed in the AHLRA and in Caltrans DOA’s findings letter that special consideration is given to schools, but as discussed in the Draft EIR: “Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.” While the AHLRA did not specifically use the term “vulnerable occupants”, the report, when taken in full, conveys that special considerations may be applied to schools as compared to other potential land uses. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P10-8:

See Response to Comments P10-1 through P10-8.

02/01/2018 10:12

P11

To: Oxnard City Council

Oxnard School District

As current Oxnard residents in close proximity to the proposed Teal Club Project, we wish to strongly voice our opposition to this development.

Our concerns:

- Increased traffic on already congested thoroughfares
- Danger to future school children in this area due to over-flights from aircraft*
- Additional usage of our precious water during this drought
- High density housing resulting in more traffic
- More unneeded retail space
- Disappearing farm fields

P11-1

*The Cal Trans Aviation Safety Officer recommended the OSD "Look for a different site further away from airport runway". The site will experience numerous over-flights by aircraft. Six significant aircraft accidents were listed in the heliplanner report, although there have been other documented accidents.

The Ventura County Airport Authority voted unanimously against both Teal Club Specific Plan and the schools.

We purchased our home in this area 26 years ago loving the adjacent spacious "rural area". We are very concerned about our neighborhood as evidenced by being active in our neighborhood watch, patrolling at night and walking during the day.

WE CARE what happens – WE OPPOSE the Teal Club Project.

Mike and Karen Turek
1230 Ebony Drive
Oxnard, CA 93030
805 988-9827

Mike Turek
Karen Turek

RECEIVED
JAN 16 2018
OFFICE

Comment Letter P11	Mike and Karen Turek Individuals
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Response to Comment P11-1:

General comments in opposition to the proposed project including concerns related to traffic; overflights from aircraft; water usage; high density housing resulting in more traffic; unneeded retail space; disappearing farm fields; aircraft accidents.

These comments are related to the merits of the project.

The Draft EIR addressed traffic impacts in Section 3.14. As noted in this section, with incorporation of Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4, impacts to traffic would be reduced to a less than significant level.

The Draft EIR addressed potential airport hazards in Section 3.8, including regulatory agencies' opposition to the proposed project location. As discussed in the Draft EIR: *"An aircraft accident can occur at any time and at any place. An accident within or near the project site could involve an aircraft taking off from or landing at Oxnard Airport or it could involve an aircraft enroute between two other airports, with no connection to Oxnard Airport. There is no way to completely guard against such occurrences. We can, however, assess the relative probability of an accident occurring within a specific area. One method of estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years. However, there are no "standards" that specifically address this issue. Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.*

The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the "worst-case scenario" project impact from airport hazards would therefore be considered potentially significant and unavoidable."

The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. This summary notes that *"There have been six significant accidents involving approaches or departures of aircraft inside the Oxnard Airport SOI and three outside the SOI, but nearby, since 1979."* The AHLRA, prepared by Heliplanners, includes a table listing historical operations counts, and pages 9-11 detail historical significant accidents surrounding Oxnard Airport. As stated in the AHLRA: *"For a historical perspective of safety at Oxnard Airport, we have reviewed its accident history. Airports sometimes experience on-airport incidents, such as hard landings, gear-up landings, taxiing accidents, etc. While these may damage aircraft or injure occupants, they do not affect off-airport land uses and are not considered significant in the context of this study. Consequently, we have not attempted to identify or record such incidents in this report."*

The Draft EIR addressed project water usage impacts in Section 3.15. As discussed in this section: *"The City of Oxnard's Water Neutrality Policy would require the OSD to demonstrate access to water supplies that meets or exceeds projected demands. The proposed project would achieve neutrality through contributing water rights, water supplies, or financial or physical offsets to the City of Oxnard that would ensure adequate water supply to address Project water demands."* Therefore, the project would have sufficient water supplies available to serve the project from existing entitlements and resources the project impact would be less than significant.

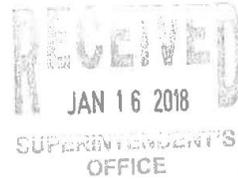
No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

OSD would like to clarify that the proposed project does not include housing or retail and is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City that includes the project site with a different development scenario. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P12

To Oxnard City Council
Oxnard School District

Jan 16, 2018



JAN 16 10 00 AM '18

I strongly oppose the Teal Club Project! I'm a retired Oxnard Elementary School teacher and I have many concerns over allowing this development.

My main concern is the danger of a possible accident located right next to an airport!

My other concerns are the increase in traffic and congestion. The use of our precious water during this drought is not necessary! We do not need more development there! We have the Collection for retail shops + housing near by. I live in Oxnard Shores Mobile Home Park, I'm concerned about the loss of farmlands which makes our city a more balanced and wonderful place to live!

P12-1

I like having the airport there, and it should remain open. But there should not be a school that close to the airport. I'm also questioning if the school proposed to build is even necessary. The district office can remodel or rebuild where they are!

Oxnard is my home, I've been living here since 1979. We need to control the growth, protect the farm fields and the students who would be attending a school so close to the airport that they are in possible danger! We don't need more retail spaces and we do need to protect our water supply!

Please oppose this development!

Sincerely,

Ellen Bouffur Harvey

5540 W. 5th St.
space 29

Oxnard, Ca
93035

805-794-8216

P12-1

JAN 18 10 18 AM '16

JAN 18 10 18 AM '16

TEAL CLUB SCHOOLS AND DISTRICT OFFICE

Located at corner of Patterson and Doris

Proposed 2 Teal Club Schools and District office. Up to 1900 students (elementary grades K-5 and Junior High grades 6-8)

View draft EIR on Oxnard School website. Click on "draft EIR" and download the document

FEEDBACK ON TEAL CLUB SCHOOLS DUE BY JANUARY 17TH AT THE OXNARD SCHOOL DISTRICT OFFICE
1051 South "A" street, Oxnard CA 93030

In draft EIR aircraft hazard is analyzed by Heliplanners on pages 1804-1821.

Traffic analysis is at the end of the draft EIR pages 1833-2595

Oxnard City Council
300 W. 3rd St.
Oxnard 93030

Heliplanner report:

Caltrans aviation safety officer recommended the OSD "look for a different site further away from airport runway" The site will experience numerous over-flights by aircrafts. Caltrans Division of Aeronautics Airport Land Use Planning Handbook mention studies considering schools to be avoided, discouraged, unacceptable, incompatible, etc. within the Traffic Pattern Zone (TPZ) of an airport.

The Department of Airports found the proposed school site to the "unacceptable"

Six significant aircraft accidents were listed in the Heliplanner report although there have been other documented accidents

The Ventura County Airport authority voted unanimously against both Teal Club Specific Plan AND the schools

P12-2

FEEDBACK TO OXNARD SCHOOL DISTRICT DUE BY JANUARY 17TH to the OSD office.

Comment Letter P12	Ellen Bougher Harvey Individual
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Response to Comment P12-1:

General comments in opposition to the proposed project including concerns related to possible accidents given the project location near an airport; increased traffic and congestion; water usage during a drought; the Collection is available for retail and housing no more development is needed; loss of farm fields; District office should remodel or rebuild where they are; and controlling growth.

These comments are related to the merits of the project. The Draft EIR addressed potential agricultural impacts in Section 3.2, airport hazards in Section 3.8, water in Section 3.9 and traffic impacts in Section 3.14. OSD would like to clarify that the proposed project does not include housing or retail and is not part of the "Teal Club Specific Plan Project." The Teal Club Specific Plan Project is a separate project currently being processed by the City that includes the project site with a different development scenario. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P12-2:

Commenter included a copy of a flyer that identifies that the Draft EIR is available for public review on the District Website; where to send comments and when feedback was due to OSD; bullet points on the Heliplanner Report related to the airport near the project site; and page numbers for the aircraft hazard analysis and traffic analysis in the Draft EIR.

OSD circulated the Draft EIR for public review and comment during a 45-day public review period beginning on December 4, 2017 and ending on January 17, 2018. All interested parties were invited to submit written comments on the Draft EIR during the public review period. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P13

-----Original Message-----

From: tskupien001@roadrunner.com [mailto:tskupien001@roadrunner.com]

Sent: Wednesday, January 17, 2018 11:40 AM

To: Cordes, Debra - School Board President <dcordes@oxnardsd.org>; Morrison, Ernie- School Board Clerk <emorrison@oxnardsd.org>; O'Leary, Denis - School Board Trustee <doleary@oxnardsd.org>; Robles-Solis, Veronica - School Board Trustee <vrobles-solis@oxnardsd.org>; Madrigal Lopez, Monica - School Board Trustee <mimadrigallopez@oxnardsd.org>; Fateh, David <dfateh@oxnardsd.org>

Subject: Teal club Specific Plan

I am writing to oppose the Doris/Patterson Road educational Facilities project. The Caltrans Aviation Safety officer recommended OSD "look for a different site further away from the airport runway." The school site would lie within the traffic pattern zone of the Oxnard airport. In 2016 there were approximately 75,000 takeoffs and landings at this airport and the control tower was in communication with an additional 15,000 passing through the airspace. The Department of Airport Authority voted unanimously against both the school site and the Teal Club Specific Plan. Aircraft noise levels could represent a significant adverse impact on the project and distracting for student learning and retention.

I am also concerned about the amount of increased traffic which would compound an already well trafficked Doris Road.

Please strongly consider voting against this project on Doris and Patterson Road. Thank you.

Sincerely,

Thaddeus Skupien
Resident of Cabrillo neighborhood

P13-1

P13-2

P13-2

Letter P13	Thaddeus Skupien Individual
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Response to Comment P13-1:

General comments in opposition to the proposed project due to the location near the Oxnard Airport. The potential for the proposed project to result in a safety hazard when located within 2 miles of an airport was addressed in Section 3.8 of the Draft EIR and an Aircraft Hazard and Land Use Risk Assessment was conducted for the project site and included as Appendix I in the Draft EIR. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

Response to Comment P13-2:

The commenter indicated that aircraft noise levels could represent a significant adverse impact on the project and distracting for student learning and retention. Potential noise impacts associated with implementation of the project were addressed in Section 3.8 of the Draft EIR. The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site is located just outside of the 60 dBA CNEL contour. Therefore, the noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and with typical educational facility construction with windows closed, interior noise levels from aircraft operations are expected to achieve 45 dBA CNEL or less, which achieves both the State and City interior noise requirements. Therefore, noise impacts from the Oxnard Airport are considered to be less than significant.

Response to Comment P13-3:

General comment regarding increased traffic on Doris Avenue. The Draft EIR addressed potential traffic impacts in Section 3.14. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P14

From: Marlene Hunau-Herman [mailto:hostrawelady@gmail.com]
Sent: Wednesday, January 17, 2018 11:40 AM
To: Fateh, David <dfateh@oxnardsd.org>
Subject: TEAL CLUB PROJECT

17 January 2018

Good morning,

There is only one major question that you need to answer.

Will the School Board and the City Council and Mayor sign a Pre "Hold Harmless and Indemnification" agreement releasing the tax paying citizens of Oxnard from any financial liability and responsibility before the first shovel of dirt has been dug for the Teal Club Project.

We know that it is inevitable that at some point in time there will be a horrific airplane crash and people will be severely injured and property will be destroyed.

The Department of Airports has said this is a dangerous venue to build schools and housing, so close to an airport. Therefore, their liability will be negated.

Municipal immunity will prevent the City from having to pay for damages and injuries.

We all say "NO" to this stupid plan.

So therefore you must have extremely "Deep Pockets" to proceed with this development.

Eagerly awaiting your response.

Marlene Herman

P14-1

Letter P14	Marlene Hunau-Herman Individual
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Response to Comment P14-1:

Commenter expressed general thoughts about liability and would like to know if the School Board, City Council and Mayor will sign a pre “Hold Harmless and Indemnification” agreement releasing the citizens of Oxnard from any financial liability and responsibility for the Teal Club Project. Commenter states that it is inevitable that at some point an airplane crash will occur and people injured and property destroyed. The Department of Airports has said this is a dangerous venue to build schools and housing so close to the airport.

The potential for the proposed project to result in a safety hazard when located within 2 miles of an airport was addressed in Section 3.8 of the Draft EIR and an Aircraft Hazard and Land Use Risk Assessment was conducted for the project site and included as Appendix I in the Draft EIR. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised that necessitate additional response.

OSD would like to clarify that the proposed project does not include housing and is not part of the “Teal Club Specific Plan Project.” The Teal Club Specific Plan Project is a separate project currently being processed by the City that includes the project site with a different development scenario.

P15

From: Morrison, Emie- School Board Clerk
Sent: Thursday, January 18, 2018 12:14 PM
To: Morales, Cesar
Subject: Fwd: Letter of Strong Opposition to the Purchase of the Teal Club Land for Future School Building

Sent from my iPhone

Begin forwarded message:

From: "David B. Littell" <db.littell@aol.com>
Date: January 17, 2018 at 4:37:32 PM PST
To: dcordes@oxnardsd.org, emorrison@oxnardsd.org, dokary@oxnardsd.org, vyobles-solis@oxnardsd.org, mmrdigallopez@oxnardsd.org
Subject: Letter of Strong Opposition to the Purchase of the Teal Club Land for Future School Building

Dear Members of the Oxnard School District Board of Trustees:

I and my wife, Myrna M. Littell, strongly oppose the purchase of the land called the Teal Club Property, or portion thereof, for the purpose of building a newschool or schools. The property is too close to the existing Oxnard Airport and is only courting a disaster. Aviation authorities and those who are intimate with the past and future likelihood of a plane and/or helicopter crash in this vicinity of the airport have stated it is just plain unsafe for this type of use. It is only a matter of time before a crash will occur. The air traffic at this airport is only going to get heavier in the coming years as the city keeps growing and the need for more aircraft transportation increases. We plead with you to find another piece of property in Oxnard to build a future school. We are residents of Oxnard and have lived here for over 30 years, and at our current location on 2621 Ruby Drive for over 27 years.

Most sincerely,

David B. Littell

2621 Ruby Drive
 Oxnard, CA 93030

805-983-6485

P15-1

Letter P15	David B. Littell Individual
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Response to Comment P15-1:

Commenter opposes the purchase of the land for the purpose of building new schools given the location near the airport and safety concerns.

The potential for the proposed project to result in a safety hazard when located within 2 miles of an airport was addressed in Section 3.8 of the Draft EIR and an Aircraft Hazard and Land Use Risk Assessment was conducted for the project site and included as Appendix I in the Draft EIR. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P16

Archived: Friday, February 02, 2018 10:28:07 AM
From: Fateh, David
Sent: Thursday, January 18, 2018 7:23:06 AM
To: Westhaus, Randy; Longman, Renee
Cc: Patricia Raphael; Emilio Flores (emilio@CFWinc.com); Penanhoat, Janet; Garcia, Lydia
Subject: FW: Teal Club - Doris/Patterson Schools proposal
Importance: Normal

The following email was received at 4:45 PM yesterday. Please review and consider addressing in the final EIR as appropriate.

Thank you,

N. David Fateh
 Director of Facilities
 Oxnard School District
 1055 South C Street
 Oxnard, CA 93030
 Office: (805) 385-1514 Ext. 2501
 Fax: (805) 486-5848
 Email: dfateh@oxnardsd.org

-----Original Message-----

From: fdgrant@earthlink.net [<mailto:fdgrant@earthlink.net>]
 Sent: Wednesday, January 17, 2018 4:45 PM
 To: Fateh, David <dfateh@oxnardsd.org>
 Subject: Teal Club - Doris/Patterson Schools proposal

Dear Oxnard School District,

I live in the Cabrillo neighborhood and I am very concerned about the proposed plans for not only two schools but a district office to be built on raw land adjacent to the Oxnard Airport. This raw land is next to the airport as a ditching zone in case airplanes are in trouble. I know that the old Oxnard High was relocated to raw land west of Patterson to avoid having planes flying over the school. Now, you want to build more schools next to the same airport! This does not make sense.

What also does not make sense is your desire to build a new district office, when the A St. building is perfectly suitable and most central to Oxnard residents. I know the Fire Dept pulled out of the proposal, but that does not mean you have to take that spot for a new office.

Please consider the serious safety issues building anything next to an airport, but particularly schools. The increased traffic would be a nightmare as most elementary school children are dropped off and picked up by parents and guardians. Doris is already in trouble in the morning for the severe traffic heading west.

There are so many, many sites better suited for schools in Oxnard. I feel that the area near Wagon Wheel is better suited because it is safer, is re-using land for buildings and closer to where children will be living. In Strawberry Fields, there are not that many school children anymore. I've lived here 25 years and have seen less children over time.

Thank you,
 Diana James

P16-1

Letter P16	Diana James Individual
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Response to Comment P16-1:

General comments concerning safety given the location of the project site near airport; does not agree with new District office when A street building is suitable; increased traffic; and suggests that there are other areas better suited for school such as near Wagon Wheel.

The Draft EIR addressed potential airport hazards in Section 3.8. The Draft EIR, Section 3.8.2.1, provides a summary of the Aircraft Hazard and Land Use Risk Assessment (AHLRA) found in Appendix I of the Draft EIR. As stated in the Draft EIR: "The project will contribute to the cumulative effect of reduction in potential emergency landing areas surrounding Oxnard Airport. However, lands north and west of the airport are devoted to agricultural or open space uses within the San Buenaventura-Oxnard Greenbelt, which is protected from future development. Those lands would therefore remain available for emergency landings if needed."

The Draft EIR addressed traffic impacts in Section 3.14. As noted in this section, with incorporation of Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4, impacts to traffic would be reduced to a less than significant level.

As noted in Section 2.1 of the Draft EIR, the District has a Master Construct and Implementation Program and continues to make facilities upgrades at District schools. The District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. As described in the Potential New School Sites, the alternative locations were rejected for various factors that made siting a school at these locations infeasible. A copy of the Potential New School Sites Study is provided in Appendix B of the Draft EIR. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

P17

From: Paul Jacobbe [mailto:pjacobbe@roskammer.com]
Sent: Monday, February 05, 2018 2:42 PM
To: Morales, Cesar
CC: O'Leary, Denis - School Board Trustee; Cordes, Debra - School Board President; Morrison, Ernie - School Board Clerk; Madrigal Lopez, Monica - School Board Trustee; Robles Solis, Veronica - School Board Trustee
Subject: DORIS AVE AND PATTERSON RD SCHOOL CAMPUS

Encl: LA Times Article of 23 August 1997 - Plane Crash At Field Near Oxnard Airport

The Oxnard School District proposes that a campus be built at Doris Ave and Patterson Rd in Oxnard, CA. This location is next to an agricultural field, between Patterson Rd and Victoria Ave, and is within one mile of the Oxnard Airport.

Pesticides, such as herbicides, insecticides and fumigants, are applied to the crops at the agricultural field. These pesticides are used to control weeds, harmful insects and plant diseases. Sprayed pesticide can drift and have a negative impact on teachers and children at the school campus. Possible long-term effects can be cancer, neurological disorders, reproductive problems, birth defects and infertility. Even low level pesticide exposure, over time, can lead to these chronic health problems. It is important to have a buffer zone around schools to prevent agricultural contamination.

P17-1

In August of 1997 there was a plane crash in this area. A plane sheared off the chimney of a house on Ivanhoe Ave. It then slammed into a cement light pole on Doris Ave ripping off a wing. The wing landed on the street bursting into flames. The plane crashed into the field across the street, the proposed site of the school project. It is noted that the plane was in trouble and was making a bee line to the Oxnard Airport. It was not in the airport flight path. Because the school project is not in the flight path does not mean there is no danger. See enclosure.

P17-2

An article appeared in the Ventura County Star on 2 September 2015. Edwards Air Force Base conducted navigation approach testing, with F-35 fighter jets, between Oxnard Airport and Point Mugu. Because of their proximity to each other, this is the only place on the West Coast that this testing can be accomplished. Military jets have crashed and destroyed homes in the San Diego area in the recent past. On 8 January 2009 an F-18 fighter jet crashed in flames in a San Diego neighborhood. Two people were killed on the ground and three homes were destroyed.

Doris Ave and Patterson Rd is a potentially dangerous place for a school campus.

Yours truly,

Paul Jacobbe

Letter P17	Paul Giacobbe Individual
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This letter was received on February 5, 2018 which was 19 days past the close of the public comment period. OSD did not respond to this letter because it was submitted late and there was insufficient time to prepare a response.

S1

**Public Comments Received During
Public Workshop for the Draft Environmental Impact Report for the Doris/Patterson Project
Agenda Item A.14
Regular Board Meeting for the Oxnard School District
December 6, 2017**

1. Ms. Ann Romero spoke and she was against this proposed new school construction project. She read the Draft EIR and stated that there was no mitigation feasible for the airport hazards and there was no mitigation feasible for the agricultural resources. She has lost trust in the Oxnard School District. Just say “No” to this proposed project. This proposed project will lower the quality of life. This proposed project will generate too much traffic. The Oxnard School District isn’t listening to their community in regards to this proposed project.

S1-1

There were no other speakers during this Public Workshop.

Speaker Number S1	Ann Romero Individual
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Response to Comment S1-1:

Ms. Ann Romero spoke and she was against this proposed new school construction project. She read the Draft EIR and stated that there was no mitigation feasible for the airport hazards and there was no mitigation feasible for the agricultural resources. She has lost trust in the Oxnard School District. Just say “No” to this proposed project. This proposed project will lower the quality of life. This proposed project will generate too much traffic. The Oxnard School District isn’t listening to their community in regards to this proposed project.

These comments are related to the merits of the project. The Draft EIR addressed potential agricultural impacts in Section 3.2, airport hazards in Section 3.8, and traffic impacts in Section 3.14. No issues related to the adequacy of the environmental analysis in the Draft EIR were raised; therefore no further response is necessary.

3.0 DRAFT EIR ERRATA

3.1 OVERVIEW

In reviewing and responding to comments on the Draft EIR, the OSD determined that minor revisions to portions of the Draft EIR text were warranted to provide clarification or amplification of certain information. CEQA Guidelines Section 15088 provides that where the response to comments makes important changes in the information contained in the text of the Draft EIR, the Lead Agency should either revise the text in the body of the EIR or include marginal notes showing that the information is revised in the response to comments.

The Final EIR Volume I, Section 3.2, provides revisions to the Draft EIR as deemed necessary based on consideration of issues raised in comments on the Draft EIR. Revisions to the Draft EIR text are shown as *errata*, consisting of an excerpt of the Draft EIR text with changes represented with added text shown in underline (example) and deleted text shown in strikethrough (~~example~~). The Final EIR includes a copy of the Draft EIR, as publically circulated, as part of Volume II.

The OSD recognizes that Volume I of the Final EIR incorporates updated legal and technical information obtained and produced after the Draft EIR was completed, and that the EIR contains additions, clarifications and modifications related to that new information. The information is provided in the Errata and identified through interlineation of the Draft EIR for clarity.

The foregoing new information provided in Volume I of the Final EIR does not include any changes to the proposed project or the environmental setting in which the proposed project is undertaken and no additional discretionary approvals are required as a result of the changes. Rather, the new information merely clarifies, amplifies or makes insignificant modifications reflected in the Draft EIR (Final EIR Volume II).

The OSD independently has reviewed and considered the Final EIR and all of its information. Volume I of the Final EIR does not add significant new information to the Draft EIR (Final EIR Volume II) that would require recirculation of the EIR under CEQA. The new information added to the EIR does not involve any new significant environmental impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure or alternative considerably different from others previously analyzed that the project Applicant declines to adopt that would clearly lessen the significant environmental impacts of the proposed project. No information indicates that the Draft EIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the Draft EIR. Thus, recirculation of the EIR is not required.

The OSD finds that the changes and modifications made as identified in Volume I of the Final EIR after the Draft EIR (Final EIR Volume II) was circulated for public review and comment do not individually or collectively constitute significant new information within the meaning of Public Resources Code § 21092.1 or CEQA Guidelines § 15088.5.

3.2 ERRATA

This section contains errata to the Draft EIR. The erratum is preceded by a brief explanation of the purpose of the change to the Draft EIR text.

3.2.1 Errata to Draft EIR Section 3.10 Land Use Planning

Explanation

Comment states that the Draft EIR incorrectly cites Table 6B of the Comprehensive Land Use Plan (CLUP) as Land Use Compatibility Standards Related to Aircraft Noise. Instead please reference Table 6A of the CLUP on

page 6-2. Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Table CA was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 3.10 Land Use Planning 3-99 (of the Draft EIR).

The adopted land use compatibility standards related to aircraft noise for Ventura County airports is identified in Table 6AB of the CLUP that establishes acceptable, conditionally acceptable, and unacceptable noise levels for various land uses around Ventura County Airports.

3.2.2 Errata to Draft EIR Section 3.3 Air Quality

Explanation

Section 3.3, *Air Quality*, and Appendix C of the DEIR address air quality issues pertaining to the project. Commenter reviewed these discussions and concurs with the assumptions and findings of the analysis that significant long-term, operational air quality impacts would not result from the project. Potential short-term air quality impacts from site preparation, grading and construction activities would be mitigated by implementation of Section 3.3.2.5, Mitigation Measures, specifically AQ-1, which outlines specific steps that the contractor shall take to reduce short-term emissions to a level of less than significant. Commenter recommends the following requirement be added to AQ-1 to enable citizens to address potential fugitive dust problems from project construction:

“Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours.”

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Mitigation Measure AQ-1 was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 3.3 Air Quality Mitigation Measure AQ-1 page 3-31 (of the Draft EIR).

- Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours.

3.2.3 Errata to Draft EIR Section 2.4 Project Description

Explanation

The commenter provided a general summary of the proposed project, a summary of the Teal Club Specific Plan project in process with the City and a general comment that the EIR did not disclose the relationship between the proposed project and the proposed Teal Club Specific Plan Project.

The Doris Avenue/Patterson Road Educational Facilities Project EIR (Draft EIR) identified the proposed project as a separate project from the Teal Club Specific Plan project.

Page 3-101 of the Draft EIR States:

“A separate proposed project, called the Teal Club Specific Plan, has a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.”

Page 3-103 of the Draft EIR States:

“Separate from the proposed project, the proposed Teal Club Specific Plan would develop land within the City’s SOI adjacent to the project site to the east and south with a variety of urban uses if approved.”

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Section 2.4 Project Description was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 2.4 Project Description page 2-4 (of the Draft EIR).

The proposed project is a separate project and not part of the proposed Teal Club Specific Plan Project that includes a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.

3.2.4 Errata to Draft EIR Page ES-4 and Section 2.4 Project Description

Explanation

The commenter states that that the Draft EIR addresses powerlines but does not indicate compliance with City Ordinance 2207 which among other things, requires all new developments of 10 acres or more to place all existing overhead facilities along the project’s frontage underground.

The proposed project is at the conceptual design phase and has not undergone the formal design phase. The Draft EIR discloses that utility improvements will be required as part of the proposed project.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to page ES-4 and Section 2.4 Project Description was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to page ES-4 and Section 2.4 Project Description page 2-8 (of the Draft EIR).

“Utility connections will need to be extended to the site, including water, sewer, gas, electric, data/telecommunications, and recycled water in compliance with existing regulations.”

3.2.5 Errata to Draft EIR Section 3.1 Aesthetics

Explanation

The commenter notes that the Draft EIR correctly identifies portions of Patterson Road and Doris Avenue that are City designated Scenic Routes but does not identify Ventura Road, east of the project site as a Scenic Route. The commenter states that the Draft EIR should include analysis of aesthetic impact from Ventura Road.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to page Section 3.1 Aesthetics pages 3-2 and 3.7 was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to page Section 3.1 Aesthetics page 3-2 (of the Draft EIR).

As is discussed in the Initial Study (Appendix A), the proposed project is not located adjacent to a designated State scenic highway or eligible State scenic highway, as identified on the California Scenic Highway Mapping System (Caltrans 2017). The City, in conjunction with Ventura County and the City of Port Hueneme has selected routes for the City’s Scenic Highway System (City of Oxnard 2006). These routes include:

- Patterson Road between Fifth Street and Hemlock Street and between Vineyard Avenue and Doris Avenue; and
- Doris Avenue between Victoria Avenue and Patterson Road; and
- Ventura Road between U.S. Route 101 and Teakwood Street.

The scenic route portion of Patterson Road is located to the immediate north of the project site. The scenic route portion of Doris Avenue is located to the immediate west of the project site. These routes have scenic values because of their views of the Ventura-Oxnard Greenbelt and in the distance, the Los Padres National Forest mountain range. The scenic route portion of Ventura Road is located approximately 0.5 miles to the east of the project site. Views of the Ventura-Oxnard Greenbelt and the project site are limited and/or blocked by intervening buildings or vegetation.

The following text revision was made to page Section 3.1 Aesthetics page 3-6 (of the Draft EIR).

The scenic route portions of Patterson Road and Doris Avenue are located to the immediate north and west, respectively, of the project site. The scenic route portion of Ventura Road is located approximately 0.5 miles to the east of the project site. Views of the Los Padres mountain range, where available, from the scenic route portions of Patterson Road, and Doris Avenue, and Ventura Road would remain unobstructed.

Views of the Ventura-Oxnard Greenbelt would primarily be from travelers on local roadways in the vicinity of the project site including Patterson Road and Doris Avenue. These are short duration viewers. Views of the Ventura-Oxnard Greenbelt from travelers on Ventura Road are limited and/or blocked by intervening buildings or vegetation. Development of the proposed project would occur on the southeast corner of Doris Avenue and Patterson Road. Therefore, travelers' views of the Ventura-Oxnard Greenbelt located to the west would not be impacted on Patterson Road. On Doris Avenue, development of the project may obstruct westbound travelers' views across the site to the Ventura-Oxnard Greenbelt for a short duration in comparison to existing conditions. On Ventura Road, development of the project may obstruct northbound and southbound travelers' views to the west across the site to the Ventura-Oxnard Greenbelt, where not currently obstructed by existing buildings or vegetation, for a short duration in comparison to existing conditions. While this would be a visual change, it would not be a significant impact since the proposed project is located in an area planned for future development in the City of Oxnard General Plan and Doris Avenue westbound travelers and Ventura Road northbound and southbound travelers would be coming from similar developed areas. Eastbound travelers on Doris Avenue would be leaving the Ventura-Oxnard Greenbelt viewing area and traveling toward more developed urban areas in the City of Oxnard. Northbound and southbound travelers on Ventura Road would be traveling through urban areas with brief glimpses of agricultural areas. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views of the Ventura-Oxnard Greenbelt along Doris Avenue and Patterson Road are generally obstructed by an existing wall along the perimeter of the development and street trees along the northern side of Doris Avenue as shown in Final Environmental Impact Report, Volume II, Figure 3-2. In addition, the proposed project will be designed to be consistent with the community character goals and policies of the City of Oxnard General Plan designed to minimize impacts to scenic resources adjacent to scenic routes. Therefore, the proposed project would have a less than significant impact on these scenic routes, and no mitigation measures are required.

3.2.6 Errata to Draft EIR Section 3.8 Hazards and Hazardous Materials and Section 4.0 Other CEQA Considerations

Explanation

The commenter recommends that an additional mitigation measure be incorporated detailing a student and staff disaster plan that shall be available to all employees and student (guardians) in case of a "worst case" scenario.

Section 3.8 of the Draft EIR identified project impact from airport hazards to be significant and unavoidable in order to account for a "worst-case scenario." The identified mitigation measure would allow for better response

planning should an aircraft hazard occur but it would not lessen the probability of an occurrence. OSD is willing to add this measure but project impact from airport hazard would remain significant and unavoidable.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Sections 3.8 Hazards and Hazardous Materials, 4.0 Other CEQA Considerations was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 3.8 Hazards and Hazardous Materials page 3-77 and Section 4.0 Other CEQA Considerations page 4-3 (of the Draft EIR).

“The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the “worst-case scenario” project impact from airport hazards would therefore be considered potentially significant and unavoidable. Mitigation Measure HAZ-6 and HAZ-7 have been identified to require a site disaster plan and public notification that the project site is within the Traffic Patterson Zone respectively. Nonetheless, project impact remains significant and unavoidable with mitigation incorporated.”

OSD made the following revisions to Section 3.8 Hazards page 3-78 Draft EIR.

“3.8.2.5 Mitigation Measures

HAZ-1: *Project development plans shall take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. Land within this area shall be considered for low average occupancy level uses, such as parking lots, or designated as landscaped “buffer” areas.*

HAZ-2: *All emergency plan(s) that are prepared for the educational facilities shall identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident.*

HAZ-3: *An LUC shall be prepared, approved by DTSC, recorded with the County of Ventura Recorder’s Office and implemented in accordance with DTSC requirements. This LUC will insure that the project site’s future use is restricted to non-residential purposes.*

HAZ-4: *During grading and project construction activities the DTSC approved SMP shall be implemented to the satisfaction of DTSC.*

HAZ-5: *Prior to completion of final design, plans shall be submitted to the FAA for an obstruction evaluation to determine if buildings and other elements (including construction activities) would penetrate the FAR Part 77-specified “notice surface”.*

HAZ-6: *OSD shall prepare a site disaster plan that accounts for a potential aircraft accident scenario. The plan shall be available to all employees and student (guardians).*

HAZ-7: *OSD shall provide notification on an annual basis to all employees and student (guardians) that the project site is located within the Traffic Pattern Zone of Oxnard Airport.*

3.8.2.6 Level of Impact After Mitigation

Implementation of mitigation measures identified above would reduce potentially significant impacts related to hazards and hazardous materials to a less than significant level for all topics except for airport hazards. In order to account for the “worst-case scenario” project impact from airport hazards would be considered potentially significant and unavoidable with mitigation incorporated.”

3.2.7 Errata to Draft EIR Section 2.4 Project Description

Explanation

The commenter reaffirms that the current 2030 General Plan land use designations for the site does not permit the development of a school and that a General Plan Amendment and Pre-zone will be required along with an Annexation request to LAFCo. The City is currently processing the Teal Club Specific Plan Project that the proposed project is located in and it is not clear how both of these proposals relate to each other. Please clarify the relationship of the proposed project to the Teal Club Specific Plan.

The Draft EIR identified the proposed project as a separate project from the Teal Club Specific Plan project.

Page 3-101 of the Draft EIR States:

“A separate proposed project, called the Teal Club Specific Plan, has a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.”

Page 3-103 of the Draft EIR States:

“Separate from the proposed project, the proposed Teal Club Specific Plan would develop land within the City’s SOI adjacent to the project site to the east and south with a variety of urban uses if approved.”

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Section 2.4 Project Description was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 2.4 Project Description page 2-4 (of the Draft EIR).

The proposed project is a separate project and not part of the proposed Teal Club Specific Plan Project that includes a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.

3.2.8 Errata to Draft EIR Section 2.4 Project Description

Explanation

Comment A8-25 states that the OPD identified ten driveway/pedestrian conflict sites on Final Environmental Impact Report, Volume II, Figure 2-2 and provided six mitigation measures to address them.

As discussed in the Draft EIR, Section 3.14.2.3, “The proposed project would be designed and constructed to meet required standards....Per the TIAR (Appendix K), there would be no increase in hazards due to a design feature or incompatible uses.”

Required off-site roadway and sidewalk improvements and project access locations will ultimately be determined by the City of Oxnard. These may, as appropriate, include the recommendations in the comment. As described in Mitigation Measures TRAF-1 through TRAF-4, the Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City’s Traffic Engineering Department.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to Section 2.4 Project Description was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 2.4 Project Description page 2-5 (of the Draft EIR).

An additional drop-off area for the playfield area is provided along Patterson Road. Security fencing will be provided around the project site. A conceptual site plan is shown in Figure 2-2.

A two-story 24,868 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. A minimum of three parking stalls will be signed and striped near the offices for the proposed elementary and middle schools for "Visitor Use Only".

3.2.9 Errata to Draft EIR Page ES-40 and Section 3.9 Hydrology and Water Quality

Explanation

In Comment A8-39 the commenter summarizes statements within the Executive Summary (page ES-40 and ES-56) related to the construction of downstream facilities within Patterson Road that are compatible with the City of Oxnard's Master Plan of Drainage. The commenter states the Draft EIR does not indicate whether the project will include construction of any new improvements further downstream, and that Patterson Road storm drain improvements will be discharged to the existing Teal Club Road facility. Lastly, the commenter states there is no analysis or discussion of the capacity and stability of the existing ditch along Teal Club to convey additional stormwater, nor is there any information in the Draft EIR addressing ownership of the ditch and its associated maintenance.

In Comment 8A-43, the commenter states that on Page 3-92, in the second paragraph, the Draft EIR states that "off-site discharges would be less than the capacity of anticipated storm drainage piping along Patterson Road" may be true but there is no discussion of the likely capacity, stability or ownership issues associated with the drainage ditch along Teal Club Road and the further downstream drainage system.

The Draft EIR evaluated Hydrology and Water Quality in Section 3.9. The Draft EIR on pages ES-40, ES-56, and 3-92, and the Stormwater Drainage Impact Section of the PWRSA (Phoenix 2017) that is included in Appendix J of the Draft EIR, indicate the proposed project anticipates the need for "new 30- and 36-inch diameter storm drainage piping infrastructure along Patterson Road from the Site to the existing Teal Club Road facility as documented in the City of Oxnard Drainage System Master Plan."

The Draft EIR on pages ES-40 and 3-92, and the Stormwater Drainage Impact Section of the PWRSA (Phoenix 2017), address concerns pertaining to capacity of the anticipated storm drainage piping. Specifically, these sections indicate that any discharge from best management practices (BMPs) designed to comply with the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, Manual Update 2011, could be released to the concrete pipe system recommended in the 2003 Master Plan of Drainage. Additionally, the Conclusion section of the PWRSA (Phoenix 2017) notes the 2003 City Master Plan of Drainage (City of Oxnard) "anticipated development of the open space in the area of the Project," that it identified the "necessary storm drain infrastructure needed to serve the area," and that these infrastructures were identified "prior to the implementation of the Municipal Separate Stormwater Sewer System requirements [that] further restricted developments from direct discharge of stormwater without detention or retention onsite."

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to page ES-40 and Section 3.9 Hydrology and Water Quality was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to page ES-40 and Section 3.9 Hydrology and Water Quality page 3-92 (of the Draft EIR).

"Review of information available at the Ventura County Assessors website indicates that the Teal Club drainage ditch is located in an unincorporated area Ventura County along Teal Club Road straddling the boundary between the public right-of-way and privately owned properties to north of Teal Club Road. Based on a reconnaissance performed by Tetra Tech on February 26, 2018 and review of the image in Google Earth dating from April 20, 2018, the ditch an unlined v-shaped structure approximately 3 feet deep and 6 feet wide that drains the properties bound by Ventura Road on the east and between Doris Avenue on the north and Teal Club Road on the south.

Assessor's Parcel Maps available at the Ventura County Assessors website indicate that the Teal Club drainage ditch serves an area of approximately 341 acres in the area between Ventura Road and Victoria Avenue that includes the project site. Review of the Google Earth images of the ditch dating from 2006 to 2016 and the physical appearance of the ditch noted by Tetra Tech during the February 26, 2018 reconnaissance indicates that the Teal Club drainage ditch has been well maintained, is not structurally damaged from excessive stormwater drainage, and appears have a carrying capacity capable of accommodating the drainage area between Ventura Road and Victoria Avenue that includes the project site. Based on its location, it is likely that the Teal Club drainage ditch is owned and maintained either by the County of Ventura or the owners properties to north of Teal Club Road."

3.2.10 Errata to Draft EIR Page ES-56 and Section 3.9 Hydrology and Water Quality

Explanation

The commenter stated that on Page ES-56, the Draft EIR indicates that MS4 post-construction BMPs are required and that they will incorporate compliance with the Ventura County TGM in the project design. The Draft EIR further states that "Onsite hydrodynamic treatment systems will treat the stormwater prior to discharge to the offsite system." The current TGM requires the project to infiltrate the Stormwater Quality Design Storm and does not allow for its discharge offsite unless 'technical infeasibility' is proven for the site. The Draft EIR does not provide any discussion of technical infeasibility regarding providing the required onsite infiltration. There is no discussion of testing for onsite infiltration rates that will be sufficient to meet MS4 permit requirements.

The Draft EIR evaluated Hydrology and Water Quality in Section 3.9. As identified in the Draft EIR, MS4 post-construction BMPs are required and the proposed project will incorporate compliance with the Ventura County TGM in the project design.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to page ES-56 and 3.9 Section 3.9 Hydrology and Water Quality was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to page ES-56 and Section 3.9 Hydrology and Water Quality page 3-92 (of the Draft EIR).

"The Ventura County TGM indicates that soils in Ventura County were grouped into seven hydrologically homogeneous families based on the Soil Survey, Ventura Area, California (U.S. Department of Agriculture, Soil Conservation Service 1970) (Soil Survey). Soils Note that the Soil Conservation Service is now identified as the Natural Resource Conservation Service (NRCS). The NRSC Soil Survey classifies soils in Ventura County into Hydrologic Groups A, B, C, and D, with two soil families each assigned Hydrologic Groups A, B, C, and one to Hydrologic Group D. The NRSC Soil Survey indicates soils at the project site are mapped as Ventura Hydrology Manual No. 3 soils, Camarillo loam (Cd) of Hydrologic Group C with an estimated permeability of 0.63 to 2.0 inches per hour.

In order for meet MS4 requirements, the Ventura County TGM states that locations like the project site where soils are mapped as Ventura Hydrology Manual No. 3, or where site specific analysis indicate infiltration rates of 0.3 to 0.5 inches per hour, and no other infiltration-related infeasibility criteria apply, shall use a Bioinfiltration BMP (or Rainwater Harvesting). Bioinfiltration is an adaption of the Bioretention with an Underdrain BMP in which the underdrain is raised above the gravel storage layer in order to promote infiltration but allow release of biotreated runoff to the storm drain when infiltration capacity is reached.

No onsite soil percolation testing has been performed to evaluate the onsite infiltration rates. Therefore, Bioinfiltration BMP (or Rainwater Harvesting) Infiltration Basins will be implemented at the project site to treat infiltrated stormwater onsite prior to release to the storm drain when infiltration capacity is reached. If subsequent

onsite soil percolation testing indicates that the project site soils have infiltration rates of 0.5 inches per hour or greater, infiltration-based BMPs will be considered for the project site in accordance with the Ventura County TGM and MS4 requirements.”

3.2.11 Errata to Draft EIR Section 3.9 Hydrology and Water Quality

Explanation

The commenter stated on Page 3-88, in the fourth paragraph (and Page 3-141), the Draft EIR states that compliance with the Ventura County TGM will be achieved by construction of a “dry extended detention basin” which are described in the TGM as “basins having outlets designed to detain the stormwater quality design volume (SQDV) for 36 to 48 hours to allow sediment particles and associated pollutants to settle and be removed.” Construction of a dry extended detention basin (with hydrodynamic separation device pre-treatment) will not fully meet TGM requirements because it does cause the infiltration of the Stormwater Quality Design Storm (a $\frac{3}{4}$ inch storm). The dry extended detention basin is intended to allow settlement of particles and provides some infiltration as a by-product. This duplicates the purpose of the hydrodynamic device. Perhaps the designer intended to provide an 'Infiltration Basin' instead of a “Dry Extended Detention Basin” but all references to discharge of storms smaller than the SQDV should be eliminated from the document. The DEIR provides insufficient information to determine that the proposed project will not have significant impacts on stormwater quality.

The commenter suggested that “Perhaps the designer intended to provide an 'Infiltration Basin' instead of a “Dry Extended Detention Basin” in the EIR. As indicated in the response to Comment 8A-40, based on review of with the Ventura County TGM, a Bioinfiltration BMP (or Rainwater Harvesting) infiltration basin would be appropriate for the known conditions at the Site.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to 3.9 Section 3.9 Hydrology and Water Quality was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 3.2.9 Section 3.9 Hydrology and Water Quality page 3-88 (of the Draft EIR).

The reference to “dry extended detention basin” was changed to “Bioinfiltration BMP Infiltration Basin”.

In addition, all references to dry extended detention basin” was changed to “Bioinfiltration BMP Infiltration Basin” in the Draft EIR. As requested in Comment 8A-41, all references to discharge of storms smaller than the SQDV were eliminated from the EIR document.

3.2.12 Errata to Draft EIR Section 3.9 Hydrology and Water Quality

Explanation

The commenter stated on page 3-92, in the first sentence of the second paragraph, the Draft EIR states that compliance with the Ventura County TGM would reduce the effective impervious area of the site to no more than 5 percent (%) of the project area. This statement is only true for storms less than or equal to the Stormwater Quality Design Storm which is somewhere between a 2-year and a 5-year storm. This statement is not true for any storm that exceeds the Stormwater Design Storm including pipe conveyance designs storms of 10-year or 100-year events.

Based on comments received on the Draft EIR, it was determined that additional clarification with regards to 3.9 Section 3.9 Hydrology and Water Quality was required. The addition of new text, does not affect the impact analysis or the severity of impacts identified in the Draft EIR. This errata does not add significant new information to the EIR and does not require recirculation of the Draft EIR (see CEQA Guidelines § 15088.5).

The following text revision was made to Section 3.2.9 Section 3.9 Hydrology and Water Quality page 3-92 (of the Draft EIR).

The statement on page 3-92 of the Draft EIR indicating that that compliance with the Ventura County TGM would reduce the effective impervious area of the site to no more than 5% of the project area was deleted from the Draft EIR.

APPENDICES

APPENDIX A: MITIGATION MONITORING AND REPORTING PROGRAM

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**MITIGATION MONITORING AND REPORTING PROGRAM:
DORIS AVENUE/PATTERSON ROAD EDUCATIONAL FACILITIES PROJECT
OXNARD SCHOOL DISTRICT
OXNARD, CA**

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
Air Quality						
AQ-1	During project construction the contractor shall ensure that: <ul style="list-style-type: none"> • All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations. • All clearing, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (mph) (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20% or greater opacity impact public roads, occupied structures, or neighboring property. 	During Construction	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<ul style="list-style-type: none"> • All fine material transported off site shall be either sufficiently watered or securely covered to prevent excessive dust. • All haul trucks shall be required to exit the site via an access point where a gravel pad or grizzly has been installed. • Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust. • Once initial leveling has ceased, all inactive soil areas within the construction site shall either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission. • On-site vehicle speed should be limited to 15 mph. • All areas with vehicle traffic should be paved, treated with dust palliatives or watered a minimum of twice daily. 					

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<ul style="list-style-type: none"> • Properly maintain and tune all internal combustion engine powered equipment; • Require employees and subcontractors to comply with the CARB idling restrictions for compression ignition engines; and use California ultra-low sulfur diesel fuel; use construction equipment with Tier 2 engines; and use interior and exterior paint with a VOC content of 100 grams per liter. • Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible to the public off the site: (805) 645-1400 during business hours and (805) 654-2797 after hours. 					
Biology						
BIO-1	Prior to construction, the general contractor shall have a preconstruction nesting bird survey conducted by a qualified biologist, prior to the use of heavy machinery or significant ground disturbance, at the ornamental tree stand north of the site and at the telephone poles west	Prior to Construction	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>and south of the site if activities are conducted within the breeding season for birds (February 15 – September 15). If any migratory or federally or state listed species birds are found to be actively nesting within 250 feet of the designated construction area, an appropriate exclusionary buffer around the active nest shall be established by the qualified biologist. The buffer distance will be determined based on the specific nesting bird species, and would be maintained until the birds have fledged from the nest. Active nests and buffers would be monitored initially by a qualified biologist to determine if active nests are being adversely affected by project activities.</p>					
BIO-2	<p>Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the ACOE under CWA Section 404 so that a jurisdictional determination regarding the ditches can be made. If the ACOE determines that any of the ditches are jurisdictional, appropriate authorizations under the Nationwide Permit Program will be implemented. The Project Manager will also seek</p>	Prior to Disturbance	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	authorization from the RWQCB under CWA Section 401, if required.					
BIO-3	Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the CDFW under Section 1602 of the California Fish and Game Code so that a jurisdictional determination regarding the ditches can be made. If the CDFW determines that any of the ditches are jurisdictional, a Streambed Alteration Agreement may be required.	Prior to Disturbance	OSD (Contractor)			
Cultural Resources						
CUL-1	Prior to any proposed construction ground disturbing activities within the Project APE, the District Project Manager will require the construction contractor to provide for all non-cultural resources personnel to be briefed, by a qualified project archaeologist (retained on-call by construction contractor) about the potential and procedures for an inadvertent discovery of prehistoric and historic archaeological resources. In addition, the training will include established procedures for temporarily halting or redirecting work in the event of a discovery,	Prior to Disturbance	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>identification and evaluation procedures for finds, and a discussion on the importance of, and the legal basis for, the protection of archaeological resources. Personnel will be given a training brochure/handout regarding identification of cultural resources, protocols for inadvertent discoveries, and contact procedures in the event of a discovery.</p>					
CUL-2	<p>If proposed project construction ground disturbing activities will reach depths containing undisturbed native soils (below 24 inches), the qualified project archaeologist will prepare an archaeological monitoring plan and a qualified archaeological monitor and Native American monitor (if requested) will be present on-site during ground disturbing activities that occur within native soils. If any cultural resources are identified by the monitor(s) during ground disturbing activities, the resource will be treated as an inadvertent discovery and the protocols outlined in the monitoring plan will be adhered to. In general, if cultural resources are encountered during ground disturbing activities in native soils, the</p>	During Construction	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>archaeological monitor will stop work within 100-feet of the find in order to assess its significance. Construction activities can continue outside the established 100-foot radius exclusion zone. Work may not resume within the 100 feet exclusion zone until the Project Archaeologist can evaluate the significance of the find and complete any necessary recordation and evaluation of the find (may include recording, testing and/or data recovery efforts) in consultation with the Oxnard School District. Construction will not proceed within the 100-foot area around the discovery until the appropriate approvals are obtained. Mr. Patrick Tumamait of the Barbareno Ventureno Band of Mission Indians, requested to be notified in the event of an inadvertent discovery. If requested by interested Tribes, a Native American Monitor will also be present during construction ground disturbing activities. A final report documenting the results of the monitoring program will be prepared by the qualified project archaeologist.</p>					
CUL-3	Prior to any ground-disturbing activities, the District Project Manager will require the construction	Prior to Disturbance	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>contractor to have a Paleontological Resource Impact Mitigation Program (PRIMP) prepared by a qualified paleontologist if project construction will exceed Holocene soils. The qualified paleontologist will also attend the worker environmental awareness program training and provide information on paleontological resources and a brochure/handout outlining procedures in the event of a paleontological find during construction. The District Project Manager will require the construction contractor to initiate implementation of the PRIMP at the beginning of ground disturbing activities. The PRIMP will address and define the following specific activities and responsibilities:</p> <ul style="list-style-type: none"> • Full-time monitoring by a qualified paleontologist during all grading and excavation extending more than 10 feet (ft) below ground surface (bgs) or beyond Holocene deposits. • Spot-check monitoring by a qualified paleontologist for all grading and excavation between 5 and 10 ft bgs to determine whether older 					

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>sediments with a potential to contain paleontological resources are present.</p> <ul style="list-style-type: none"> • Procedures for project personnel and/or paleontological monitor to halt work and temporarily redirect construction away from an area if paleontological resources are encountered during grading or excavation in order to assess the significance of the find. • Procedures for recommendations regarding level of monitoring effort (e.g. spot check, full-time) depending upon sensitivity of soil depth, identification of finds, etc. • Procedures for handling collected material and curation. • Procedures for reporting and documenting the results of the monitoring program. • Provide brochure of environmental awareness training 					
Geology						
GEO-1	The building design for structures at the Project shall use geotechnical	Prior to Construction	OSD (Architect)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>building design recommendations that are based on a site specific ground motion hazard analysis for the Project site performed in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site specific ground motion hazard analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.</p>					
GEO-2	<p>The building design for structures at the Project shall use geotechnical building design recommendations that are based on a site specific evaluation of the liquefaction potential performed in accordance with the 2013 CBC (CBSC 2016) and the methods in the Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A (CGS 2008). The site specific liquefaction potential analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.</p>	Prior to Construction	OSD (Architect)			
GEO-3	<p>Potential soil erosion that would occur during construction activities, including site grading, structure assembly, and utility extension shall be reduced to a less than significant level with standard erosion mitigation</p>	During Construction	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	measures, including the use of hay bales and other erosion control devices as determined by site-specific conditions, limiting construction to the dry season, and soil wetting, applied as required under applicable regulatory guidelines and standards.					
GEO-4	Special foundation design procedures in the building design for structures at the Project use the geotechnical building foundation design recommendations in the 2017 ESSE Geotechnical Report (ESSC 2017) that are based on a site specific evaluation of the expansive soils potential. The site specific expansive soil analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.	Prior to Construction	OSD (Architect)			
Hazards						
HAZ-1	Project development plans shall take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. Land within this area shall be considered for low average occupancy level uses, such as parking lots, or designated as landscaped "buffer" areas.	Prior to Construction	OSD (Architect)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
HAZ-2	All emergency plan(s) that are prepared for the educational facilities shall identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident.	Prior to Operation	OSD			
HAZ-3	A Land Use Covenant shall be prepared, approved by DTSC, recorded with the County of Ventura Recorder's Office and implemented in accordance with DTSC requirements. This Land Use Covenant will insure that the project site's future use is restricted to non-residential purposes.	Prior to Construction	OSD			
HAZ-4	During grading and project construction activities the DTSC approved SMP shall be implemented to the satisfaction of DTSC.	During Construction	OSD (Contractor)			
HAZ-5	Prior to completion of final design, plans shall be submitted to the FAA for an obstruction evaluation to determine if buildings and other elements (including construction activities) would penetrate the FAR Part 77-specified "notice surface."	Prior to Construction	OSD (Architect)			
HAZ-6	OSD shall prepare a site disaster plan that accounts for a potential aircraft accident scenario. The plan shall be	Prior to Operation	OSD			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	available to all employees and student (guardians).					
HAZ-7	OSD shall provide notification on an annual basis to all employees and student (guardians) that the project site is located within the Traffic Pattern Zone of Oxnard Airport.	Annually	OSD			
Hydrology						
HYDRO-1	If perched groundwater is encountered during construction, the OSD shall apply for coverage under the Los Angeles RWQCB's Groundwater Discharge Permit, and adhere to the permit provisions therein.	During Construction	OSD (Contractor)			
HYDRO-2	The OSD shall develop and implement a site evacuation plan to be implemented in conjunction with the County of Ventura OES Dam Failure Response Plan.	Prior to Operation	OSD			
Noise						
N-1	Construction noise levels fluctuate depending on the construction phase, equipment type and duration of use; distance between noise source and sensitive receptor; and the presence or absence of barriers between noise source and receptors. Therefore, the Project proponent should require construction contractors to limit standard construction activities as follows:	During Construction	OSD (Contractor)			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<ul style="list-style-type: none"> • Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. In addition, the time allowed for equipment and trucks to idle will be limited to the extent practicable. • Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools 					

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	<p>is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible. This could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.</p> <ul style="list-style-type: none"> • Heavy construction equipment operations should be limited during the school period when classrooms are being utilized in the adjacent building. • When heavy construction activities are located within 75 feet of a residential structure deploy a temporary portable sound barrier between the construction activities and nearest sensitive receptor. 					
Traffic						
TRAF-1	Victoria Avenue (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic	Prior to 2020 School Development	OSD			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	Engineering Department for intersection improvements at Victoria Avenue (NS) at Doris Avenue (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.					
TRAF-2	Victoria Avenue (NS) at Teal Club Road (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department for intersection improvements at Victoria (NS) at Teal Club Road (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.	Prior to 2020 School Development	OSD			
TRAF-3	Patterson Road (NS) at Doris Avenue (EW). Implement improvements on Patterson Road between Doris Avenue and Teal Club Road to widen this roadway segment to local arterial standards. The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department based on the	Prior to 2025	OSD			

Mitigation Measure	Requirements of Measure	Time Frame	Responsible Party	Completed	Initials and Date	Notes/Comments
	project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2025 Phase 2 Teal Club development.					
TRAF-4	Patterson Road (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.	Prior to 2020 School Development	OSD			

EXHIBIT "A"
Resolution #17-30
(2 of 2)

Job No. 34007.05

Final Environmental Impact Report
Doris Avenue/Patterson Road
Educational Facilities Project
Ventura County, California
SCH# 2017051041

Volume II
Draft EIR

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March 12, 2018

EXECUTIVE SUMMARY

This Final Project Environmental Impact report (EIR) was prepared by Oxnard School District (OSD or the District), to evaluate potential impacts from all phases of project planning, implementation, and operation for the proposed Doris Avenue and Patterson Road Educational Facilities Project (proposed project). OSD proposes to construct and operate joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. As lead Agency for the California Environmental Quality Act (CEQA), the District prepared this Final EIR in compliance with the State CEQA Guidelines and City of Oxnard CEQA Guidelines (Oxnard 2017).

The content of this EIR was established based on the findings in the Initial Study (IS) and input received from agencies and individuals during the public scoping process. Topics discussed in detail in this EIR include: Aesthetics, Agriculture, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils, Green House Gases (GHGs), Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Noise, Population, Public Services, Transportation and Traffic, and Utilities and Service Systems.

This EIR serves as a public disclosure document explaining the effects of the proposed project on the environment, alternatives to the project, and ways to minimize adverse effects and to increase beneficial effects. The EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components.

Project Location

The project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, State of California as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of 1,088,824.84 square feet (approximately 25 acres).

The project site has a Ventura County General Plan land use designation of agricultural-urban reserve and a zoning designation of agricultural exclusive (AE-40). Since the project site is also within the SOI of the City of Oxnard, the City of Oxnard General Plan identified land use designations for the site. The City of Oxnard General Plan land use designations for the project site include public/semi-public, open space, and park.

The project area is relatively flat and is currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east, and west. The agricultural land to the west is located within the Ventura-Oxnard Greenbelt. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. Oxnard Airport is an active general aviation/small scheduled service airport and the project site is located within Safety Zone 6, identified as the Traffic Pattern Zone (Caltrans 2014).

Project Description

The OSD proposes to construct and operate a new elementary (K-5), middle school (6-8) and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The project site is located within unincorporated Ventura County and within the City of Oxnard SOI area.

Parcel Boundary

Pursuant to Government Code Section 66428(a)(2), and in compliance with City of Oxnard Municipal Code Section 15-11, under a statutory exemption in the Subdivision Map Act, a tentative map is not required for property transferred to or from a government agency proceeding under Government Code section 66428(a)(2).

Reorganization

The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization. The following LAFCo actions would be necessary components of the reorganization:

- Annexation to the City of Oxnard
- Annexation to the Calleguas Municipal Water District
- Annexation into Metropolitan Water District of Southern California
- Detachment from Oxnard Drainage District 1
- Detachment from the Ventura County Resource Conservation District
- Detachment from the Ventura County Fire Protection District
- Detachment from Ventura County Service Area No. 32
- Detachment from Ventura County Service Area No. 33

As part of the reorganization process, sphere of influence amendments will also be needed. Anticipated amendments include the following:

- Amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services.

School Facilities

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students- on-site. In total, the proposed project would comprise approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces on-site. In addition, the proposed project includes a variety of playfields and recreational areas to accommodate the recreational needs of the K-8 student's on-site. These facilities include a separate playground for the kindergarten with play structures and open space. There will be lower and upper grade play areas with hard courts for tether ball, basketball and volley ball and motor skill development as well as play structures. Grass fields will be used for kickball, soccer, softball, track and field challenges and general play. The elementary school will have a multi-

purpose room for some indoor recreational activities during inclement weather and potential after hours community use. An additional drop-off area for the playfield area is provided along Patterson Road.

A two-story 24,868 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. An elementary school drop-off and pick-up area would separate the district office space from the elementary school buildings. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. The elementary school buildings are clustered together to the east of the District office area with primary access provided from Patterson Road. These buildings are anticipated to include:

- Multi-Purpose & Food Services (8,975 sq. ft.)
- Two-Story / 23 Classroom Building (36,692 sq. ft.)
- Administration Building (3,005 sq. ft.)
- Media Center & Student Support Services (4,210 sq. ft.)
- Kindergarten (18,346 sq. ft.)

A parking lot with 42 spaces is provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces are provided within the drop-off and pick-up area to the west.

The middle school buildings are located near the northeast corner of the site and are anticipated to include:

- Administration Building (4,200 sq. ft.)
- Media Center (2,153 sq. ft.)
- Visual Arts & Music (3,400 sq. ft.)
- Student Support/Conference Center (4,083 sq. ft.)
- Food Services (3,900 sq. ft.)
- Two-Story/ 41 Classroom Building (45,312 sq. ft.)
- Two-Story Science Building (2,600 sq. ft.)
- Two-Story Restrooms (3,000 sq. ft.)
- Gymnasium (13,934 sq. ft.)

Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pick-up area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed new access road is expected to terminate at the southernmost access to the parking lot for the school.

Project Design Features

Noise

Classrooms would be designed and constructed to have a Community Noise Equivalent Level of 45dB or less. The exterior mechanical equipment is anticipated to be located on roofs in a protected manner such as a parapet.

Landscaping

The project site will have a drought tolerant landscape that meets the 2009 Model Water Efficiency Landscape Ordinance (MWELO) regulations adopted by the Department of Water Resources (DWR).

Lighting

The proposed project will include necessary lighting for adequate nighttime safety and security. Campus lights will be shielded and directed downward to the extent feasible. No lighted playfields are proposed.

There are existing street lights located on the north side of Doris Avenue at the intersections of Patterson Road and at the intersection of Daffodil Way. Those facilities will most likely remain in effect; however, the proposed

project would install street lighting on the proposed project frontage and the City may require additional lighting to be installed on Patterson Road and Doris Avenue in the project area. The proposed access road from Doris Avenue to Teal Club Road will also include street lighting.

Stormwater Drainage

The proposed project would install curb and gutter improvements along the north and south sides of the project site. There would be an access road on the east side of the project site and that paved road shall have curb and gutter along the west side. These facilities would route non-project site stormwater around the parcel. The proposed project improvements would include post construction best management practices (BMPs) to manage the storm flows generated by the hardscape portion of the project. The existing agricultural site conditions shall be considered similar to the proposed landscaped areas on the project site plan. Site improvements intended to deal with the proposed project stormwater shall be designed in accordance with the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, Manual Update 2011. It is intended to utilize BMPs such as a dry extended detention basin (TCM-1) coupled with hydrodynamic separation devices (PT-1) for the parking lot areas. The groundwater is anticipated to be relatively close to the surface so infiltration BMPs such as dry wells may not be preferable (Phoenix 2017).

The southern portion of the project site are soccer fields totaling approximately 6.7 acres of the parcel. As part of this project, those areas would be depressed 8 inches below the surrounding grade (or conversely an 8-inch-tall earthen berm would be constructed along the western, eastern and southern boundaries to collect and detain the storm runoff from the Project. At that depth, this area would collect 195,640 cubic feet (4.5 acre feet) of runoff. This runoff could be detained for up to two days and then the remainder released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Master Plan of Drainage. Preliminary calculations indicate that 5 acre feet of runoff would be generated by a 100 year storm event. The project site could detain that volume with only 0.5 acre feet of runoff (Phoenix 2017).

The parking lot areas would drain to the south field detention areas. The parking lot areas would be filtered to collect the trash, debris and oil/petroleum products out of the runoff prior to discharge onto the field detention areas. The proprietary hydrodynamic filter systems have not been identified at this time, but will be part of the design efforts. Each parking lot will have one device for treating that specific area. Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017).

Transportation/Circulation

A new access road is proposed to the east of the project site as shown on the conceptual site plan. The City will dictate the final route for the access road. The sidewalks on the north side of Doris Avenue are a 4-foot-wide meandering walk. The sidewalks on the south side of the street due to the pedestrian traffic will most likely need to be wider (6- or 8-feet) and will have the width dictated by the City. On Patterson Road, the sidewalk will match Doris Avenue. While the educational facilities would be contained within the 25-acre project site; the City may require the sidewalk be extended to at least the project boundary.

Utility Connections

The project site is currently undeveloped and used for agriculture. Utility connections will need to be extended to the site, including water, sewer, gas, electric, data/telecommunications, and recycled water.

- On the west side of the proposed site (Patterson Road) there are existing 15- and 8-inch diameter wastewater pipelines. Teal Club Road has a 21-inch diameter sewer pipeline that collects flow and transports it to the west where it heads south on Victoria Avenue. There are no wastewater facilities located in Doris Avenue. The City's Master Plan shows that there are no capacity issues in the Teal Club Road trunk sewer pipeline or the pipelines located in Patterson Road. Discussion with the City Public Works Department during design will determine if the 8- or 15-inch diameter pipeline is connected to for serving the project site. The addition of the proposed project is assumed to not

cause capacity improvements in the existing collection system (Phoenix 2017). There is an existing 12-inch diameter potable water pipeline that is located on Doris Avenue across the frontage of the proposed site.

- Power facilities are located on Doris Avenue and a portion of Patterson Road as underground facilities. South of the first aerial pole on Patterson Road, the power facilities are aerial.
- Gas facilities are not present on Doris Avenue or Patterson Road according to the record drawings received from the Gas Company.
- Recycled water pipelines are not present in Doris Avenue or Patterson Road; however, the City may require installation of a mainline. The proposed project would be designed with “purple pipe” for recycled water so that the proposed project can connect if recycled water becomes available.
- Telecommunication facilities exist on Patterson Road and in the development to the north (across Doris Avenue).

Project Construction

Construction of the proposed K-5 and 6-8 schools are planned to start in 2019. All project construction activities including those for the Administrative Facilities are anticipated to be completed by the start of the 2021-2022 school year. The Project construction activities are anticipated to occur in phases and include site preparation, grading, building construction, paving, architectural coating, and landscaping.

Anticipated construction equipment includes graders/compactors, backhoes, watering trucks, trucks carrying required fill or spoils would be used for the grading portion of the project(s). During the building construction phases, material delivery trucks, including tractor trailers, would be bringing raw and finished materials and equipment. Paving for parking areas and hardcourts are expected to be asphalt. Concrete for foundations floor slabs and walkways and plazas shall be delivered via concrete mixing vehicles. Back hoes and forklifts and small cranes are also anticipated to move materials around the site or assist in placing in the facilities.

The size of the construction crews for either the elementary or middle school will vary day by day. Typical days have an average of 20 personnel on-site, while peak personal levels may reach over 50 depending on activities and the project schedule. Personnel working on the project site will park on-site. Contractor field personnel for each school or office would typically include a project superintendent, assistant superintendent, and a clerk. A project manager may also be assigned to be on-site for a portion of each work day. One project inspector is expected to be on-site for each facility. Specialty inspectors would be on-site for various activities such as welding or masonry. Periodically architects, engineers, public agency and District staff would be on-site to review progress (typically weekly).

Employees

The District Administrative Facility would have approximately 113 staff (CFW 2015). The approximate number of employees for each school was estimated based on the educational specifications approved by the Board. The K 5 elementary school is anticipated to have approximately 52 employees. This includes 7 administrative staff (including a psychologist and nurse), 30 teachers, 6 aides, 1 library staff, 1 technology teacher, 4 cafeteria workers, 2 janitors, and 1 grounds staff. The 6-8 middle school is anticipated to have approximately 74 employees. This includes 7 administrative staff (this also includes a psychologist and nurse), 50 teachers, 4 aides, 2 library workers, 1 technology teacher, 6 cafeteria workers, 3 janitors, and 1 grounds staff.

Required Permits and Approvals

This EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components. A public agency, other than the lead agency, that has discretionary approval power over a project is known as a “responsible agency” as defined by CEQA Guidelines Section 15381. The City of Oxnard, LAFCo, Ventura County Airport Land Use Commission, Calleguas Municipal Water District, and MWD are responsible agencies. Anticipated discretionary actions for the proposed project are identified in the table below.

Discretionary Actions

Agency/Organization	Role	Action
Oxnard School District	Lead Agency	<ul style="list-style-type: none"> Approve Project (Educational Specifications, Design/Construction Funding and Associated Contract Approvals)
City of Oxnard	Responsible Agency	<ul style="list-style-type: none"> Initiate Reorganization GPA and Pre-Zone
LAFCo	Responsible Agency	<ul style="list-style-type: none"> Approval of Reorganization
Ventura County Airport Land Use Commission	Responsible Agency	<ul style="list-style-type: none"> Finding of Consistency or Inconsistency with the Airport Comprehensive Land Use Plan
Calleguas Municipal Water District (CMWD) & Municipal Water District	Responsible Agencies	<ul style="list-style-type: none"> MWD Formal Terms CMWD Approval of Annexation (accept MWD Formal Terms and LAFCo Conditions)

In addition to discretionary actions, additional state, regional and/or local government permits may be required to develop the proposed project, whether or not they are explicitly listed in the table below.

Non-Discretionary Permits/Approvals

Agency	Permit/Approval
City of Oxnard	Local roadway modifications and water connections
California Department of Education	Approval of construction plans and allocation of construction funding
Fox Canyon Groundwater Management Agency	Approval of water allocation transfer
California Department of Fish and Wildlife	Jurisdictional determination; if needed, Streambed Alteration Agreement
California Department of Toxic Substance Control	Approval of Land Use Covenant
Division of the State Architect	Approval of construction plans and grading permit
Federal Aviation Administration	Obstruction evaluation
State Water Resources Control Board	Stormwater Construction General Permit
Los Angeles Regional Water Quality Control Board	If needed, authorization under Clean Water Act Section 401 If needed; Groundwater Discharge Permit
U.S. Army Corps of Engineers	Jurisdictional determination; if needed, authorizations under the Nationwide Permit Program

Known Areas of Controversy

Areas of controversy include known issues or concerns raised by agencies and the public regarding the proposed project. Known issues of concern to OSD are based on preliminary agency consultation, public scoping meeting

comments, and comment letters received in response to the NOP. The general key areas of known controversy and the location where the issue is addressed in the EIR are provided below.

General Areas of Known Controversy

Area of Concern	EIR Section Where Topic is Addressed
Site location near airport	Section 3.8 Hazards and Hazardous Materials
Aircraft hazard	Section 3.8 Hazards and Hazardous Materials
Airport related noise	Section 3.11 Noise
Agricultural conversion and compatibility	Section 3.2 Agriculture
Air quality	Section 3.3 Air Quality
Community character	Section 3.1 Aesthetics
Traffic and traffic safety	Section 3.14 Transportation and Traffic
Water supply and demand	Section 3.9 Hydrology and Water Quality Section 3.15 Utilities and Service Systems

Alternatives

Alternatives considered in this EIR include:

- No Project Alternative – This alternative assumes that improvements described for the proposed project would not be implemented. OSD would not implement any changes to the project site that would result in changes to existing project site or existing agricultural uses. Under the No Project Alternative it is assumed that increases in enrollment would have to be accommodated by existing OSD schools.
- Reduced Project Use Alternative – Under the Reduced Project Alternative, total student capacity would be reduced by more than 20% as follows: 900 middle school students in grades 6-8 and 600 elementary school students in grades K-5. With the reduction in capacity, there would be a proportional reduction in classroom square footage. Support facilities (e.g., multipurpose room, food services, library, administration) would also be reduced in size. It is assumed that there would be an overall decrease in square footage by 15%. There would be no change to the District Office component.

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. This would ideally be the alternative that results in fewer (or no) significant and unavoidable impacts. CEQA Guidelines Section 15126(d)(2) states that if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

A comparison of each alternative is provided in the following table. The No Project Alternative would result in no impacts to any of the issue areas. The Reduced Project Alternative would reduce potential impacts of the proposed project, although would still result in significant and unavoidable impacts. The No Project Alternative would be the environmentally superior alternative, but would not meet any of the project objectives. The environmentally superior development alternative would likely be the Reduced Project Alternative since this alternative would result in slightly less impacts due to decrease of development intensity on the project site.

Summary of Project Alternatives

Issue Area	Proposed Project	No Project	Reduced Project
Aesthetics	LTS	NI	LTS
Agriculture	S	NI	S
Air Quality	LTS/M	NI	LTS/M
Biological Resources	LTS/M	NI	LTS/M
Cultural and Tribal Cultural Resources	LTS/M	NI	LTS/M
Geology and Soils	LTS/M	NI	LTS/M
Greenhouse Gas Emissions	LTS	NI	LTS
Hazards and Hazardous Materials	S	NI	S
Hydrology and Water Quality	LTS/M		LTS/M
Land Use and Planning	LTS	NI	LTS
Noise	LTS/M	NI	LTS/M
Population	LTS	NI	LTS
Public Services	LTS	NI	LTS
Transportation	LTS/M	NI	LTS/M
Utilities and Service Systems	LTS	NI	LTS

NI = No Impact

LTS = Less Than Significant

LTS/M = Less Than Significant with Mitigation

S = Significant and Unavoidable

Summary of Environmental Impacts

Provided in the table herein is a summary of the environmental issues discussed in the EIR, level of significance before mitigation, mitigation measures (when warranted), and the level of impact after mitigation.

Summary of Project Impacts, Mitigation Measures and Level of Impact After Mitigation
Doris Avenue/Patterson Road Educational Facilities Project
Oxnard School District

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
3.1 Aesthetics			
<i>Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway, or route identified as scenic by the County of Ventura or City of Oxnard?</i>	Less than Significant Impact. Views of the Ventura-Oxnard Greenbelt would primarily be from travelers on local roadways in the vicinity of the project site including Patterson Road and Doris Avenue. These are short duration viewers. Development of the proposed project would occur on the southeast corner of Doris Avenue and Patterson Road. Therefore, travelers' views of the Ventura-Oxnard Greenbelt located to the west would not be impacted on Patterson Road. On Doris Avenue, development of the project may obstruct westbound travelers' views across the site to the Ventura-Oxnard Greenbelt for a short duration in comparison to existing conditions. While this would be a visual change, it would not be a significant impact since the proposed project is located in an area planned for future development in the City of Oxnard General Plan and westbound travelers would be coming from similar developed areas. Eastbound travelers on Doris Avenue would be leaving the Ventura-Oxnard Greenbelt viewing area and traveling toward more developed urban areas in the City of Oxnard. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views of the Ventura-Oxnard Greenbelt along Doris Avenue and Patterson Road are generally obstructed by an existing wall along the perimeter of the development and street trees along the northern side of Doris. In addition, the proposed project will be designed to be consistent with the community character goals and policies of the City of Oxnard General Plan designed to minimize impacts to scenic resources adjacent to scenic routes. Therefore, the proposed project would have a less than significant impact on these scenic routes, and no mitigation measures are required.	No mitigation is required.	Less than Significant Impact
<i>Would the project substantially degrade the existing visual character or quality of the site and its surroundings?</i>	Less than Significant Impact. Visual impacts would result from construction activities, including the presence of equipment, materials, and workers, at the project site, and along Doris Avenue and Patterson Road. These impacts would be considered short-term and temporary. Vehicles such as automobiles, pickup trucks, and dump trucks would be visible. Heavy equipment such as backhoes, graders, and excavators and workers would be visible during site clearing,	No mitigation is required.	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>grading, construction, and site cleanup. Construction equipment and activities would be seen by various viewers in proximity to the project site, including pedestrians and motorists on Doris Avenue and Patterson Road. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views along Doris Avenue and Patterson road are generally obstructed by the existing wall and street trees. Therefore, project visual impacts from construction activities would be less than significant.</p> <p>The visual characteristics of the proposed project would be consistent with the developed areas immediately to the north and nearby to the east. The project would be consistent with the visual character of future development anticipated under the City of Oxnard General Plan for the project site area. The project would represent the continuation of existing city-wide land use patterns and proposed new development within the northeastern portions of the City of Oxnard SOI on land used for a variety of agricultural and open space uses (City of Oxnard 2011). Therefore, project impacts to visual character and quality would be less than significant and no mitigation measures are required.</p>		
<p><i>Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?</i></p>	<p>Less than Significant Impact. The proposed project would install street lighting on the project frontage and the City may require additional lighting to be installed on Patterson Road and Doris Avenue within the project area. The proposed project would include exterior lighting around the buildings, walkways and parking areas as needed for adequate safety and security at night. No lighted playfields are proposed. The exterior finish of the proposed buildings would not include any highly reflective surfaces aside from standard glass windows.</p> <p>The proposed project would be constructed with materials and lighting that will be consistent with the lighting principles contained in the Community Design Element of the City of Oxnard General Plan (Oxnard 2011) and the Oxnard Municipal Code (Oxnard 2017), that require that all outdoor lights be designed, located, and arranged so as to reflect the light away from adjoining properties or streets. Campus lights will be shielded and directed downward to the extent feasible to minimize glare for pedestrians and drivers and to minimize spillover light. The landscaping buffers surrounding all the parking lots will also minimize and/or block campus lighting and any headlights from vehicles traveling on the project site. While the proposed project would introduce new sources of</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	light and glare; this change would be similar to existing light associated with the adjacent residential neighborhoods and roads. Therefore, the proposed project would not result in a substantial source of light or glare and project impact would be less than significant.		
<i>Cumulative Aesthetic Impacts</i>	Less than Significant Impact. Through the development of the proposed project and other development contemplated for this area in the City of Oxnard General Plan, the visual character of the project area would increasingly change from agricultural to urban. The City of Oxnard 2030 General Plan Program EIR evaluated the potential environmental impacts of buildout of the 2030 General Plan, including the project area. The 2030 General Plan Program EIR found that, while this development would have impacts related to scenic routes, visual character, and light and glare, these impacts would be less than significant and would not require mitigation. As the proposed project is similar to the development contemplated for the project site in the City of Oxnard General Plan, the proposed project's incremental contribution to impacts associated with visual quality would be less than significant.	No mitigation is required.	Less than Significant Impact
3.2 Agriculture			
<i>Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</i>	Significant Impact. The permanent conversion of Farmland of Statewide Importance to non-agricultural uses would result in a significant impact. While City policies encourage establishment of a farmland protection program and use of conservation easements and land banking to protect continued agricultural uses throughout the City's SOI, presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009). The City also has policies and programs that support existing agricultural buffers (such as the SOAR Ordinance) in order to reduce or slow further loss of agricultural resources, however, these policies do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce this impact to a less than significant level, therefore this impact would remain significant and unavoidable (City of Oxnard 2009).	No mitigation is feasible.	Significant Unavoidable Impact
<i>Would the project conflict with existing zoning for agricultural use?</i>	Less than Significant Impact. The project site is currently located within unincorporated Ventura County and is within the Ventura County SOAR boundary. The Ventura County General Plan land use designation for the project site is	No mitigation is required.	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>agricultural-urban reserve and the zoning designation is agricultural exclusive (AE-40). Schools are prohibited within the County's AE-40 zone. However, the proposed project includes annexation into the City of Oxnard thereby the County's land use designations would no longer be applicable to the project site.</p> <p>The project site is also within the City of Oxnard's SOI with a City of Oxnard General Plan land use designations of public/semi-public, open space and park. The project site is in an area planned for future development in the City of Oxnard 2030 General Plan. The proposed project includes annexation into the City of Oxnard. The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). With the approval of the GPA, Pre-Zone, and Annexation, the proposed project would be consistent with zoning. Impacts would be less than significant and no mitigation is required.</p>		
<p><i>Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?</i></p>	<p>Less than Significant Impact. The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues. Per the County of Ventura Agriculture/Urban Buffer Policy, a 300-foot setback from adjacent agricultural uses to new structures and sensitive uses is required on the non-agricultural property unless a vegetative screen is installed. With a vegetative screen, the buffer/setback is a minimum of 150 feet. These guidelines apply to projects requiring discretionary approval by the county or a city where the proposed non-farming activity is abutting or on land zoned AE, OS or RA, and the farming activity is located outside a Sphere of Influence, as adopted by LAFCO. However, the project site is located within the SOI for the City of Oxnard and buildout of the site was accounted for as part of the 2030 General Plan. In addition, the proposed project includes annexation into the City of Oxnard with a proposed C-R zone, thereby the County's land use designations would no longer be applicable to the project site. As such, these guidelines would not apply to the proposed project.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>While the County of Ventura Agriculture/Urban Buffer Policy would not apply to project, the District has designed the layout of the project in order to minimize compatibility issues with adjacent agricultural uses. Based on input from the Ventura County Agricultural Commissioner, the proposed project was designed to cluster the school facilities within the middle of the northern portion of the site closer to the existing residential neighborhood to the north. The orientation and location of the drop off areas, bus turnouts, and play fields in the proposed site plan were also designed as a result of consultation with the County of Ventura’s Agricultural Commissioner. The southern half of the project site will be composed of play fields (soccer, baseball, and hardcourts) and bordered by a vegetative screen, providing a buffer of over 400 feet or greater between the elementary and middle school buildings and the agricultural uses to the south.</p> <p>In addition, as appropriate and applicable, the District will follow recommendations in <i>Farming Near Schools, A Community Guide for Protecting Children</i> (Ag Futures Alliance 2002).</p> <p>With the implementation of these policies, as appropriate, to compatibility issues impacts associated with compatibility issues conversion of the project site from agricultural uses to non-agricultural uses would be less than significant.</p>		
<p><i>Cumulative Agricultural Impacts</i></p>	<p>Significant Impact. Buildout of the City would result in the conversion of up to 2,000 acres of important farmland including 1,230 acres of Farmland of Statewide Importance (City of Oxnard 2009). The cumulative loss of 4,335 acres of important farmland is expected due to development in the County of Ventura (County of Ventura 2005). The proposed project would contribute to the cumulative loss of agricultural lands within the region, specifically acres of Farmland of Statewide Importance. As discussed above, presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009) and City policies and programs to reduce or slow further loss of agricultural resources do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce the project’s contribution to this significant cumulative impact to a less than significant level, therefore this cumulative impact would remain significant and unavoidable.</p>	<p>No mitigation is feasible.</p>	<p>Significant Unavoidable Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
3.3 Air Quality			
<p><i>Conflict with or obstruct implementation of the applicable air quality plan?</i></p>	<p>Less than Significant Impact. The proposed project is currently at least partially consistent with the existing General Plan land use designation Public/Semi-Public and would be consistent with the proposed School land designation if approved. The area designated as Public/Semi Public in the City of Oxnard General Plan is similar to the area that would be occupied by the proposed project structures (e.g., classrooms and offices). The only difference is that the proposed project would be located only about 40 percent on the area designated Public/Semi-Public. The other approximately 60 percent would be located on the areas designated as Open Space and Park. The recreational facilities of the proposed project are consistent with the Open Space and Park land uses. As noted in Section 3.12 Population of this EIR, the proposed project would not induce substantial population growth into the area either directly or indirectly. The student population would be part of the existing and projected growth for the city. In general, K-12 schools accommodate growth as a result of other land use decisions in the City such as the construction of new homes. As these educational facilities would accommodate existing and projected growth and the requirement for local schools, an indirect impact related to growth inducement would not occur. The proposed project would not result in population growth above what is forecasted in the 2030 General Plan and in turn the 2016 AQMP. Therefore, the proposed project would not conflict or obstruct implementation of the applicable 2016 AQMP and project impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</i></p>	<p>Potentially Significant Impact during Construction. Ventura County does not have significance thresholds for construction emissions due to the fact that construction emissions occur only on a temporary basis and do not contribute to long-term air quality impacts. Thus, emissions resulting from proposed project would not be expected to have a significant impact on the environment and no mitigation measures would be required. However, Mitigation Measure AQ-1 is provided to minimize fugitive dust emissions and to ensure compliance with CARB off-road regulations in accordance with Ventura County recommendations for construction emissions exceeding the county's thresholds of significance of 25 pounds per day for NO_x and SO_x. With</p>	<p>Mitigation Measure AQ-1 During project construction the contractor shall ensure that:</p> <ul style="list-style-type: none"> • All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations. 	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>compliance with AQ-1, project impact would be less than significant.</p>	<ul style="list-style-type: none"> • All clearing, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (mph) (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20% or greater opacity impact public roads, occupied structures, or neighboring property. • All fine material transported off site shall be either sufficiently watered or securely covered to prevent excessive dust. • All haul trucks shall be required to exit the site via an access point where a gravel pad or grizzly has been installed. • Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust. • Once initial leveling has ceased, all inactive soil areas within the construction site shall either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission. • On-site vehicle speed should be limited to 15 mph. • All areas with vehicle traffic should be paved, treated with dust palliatives or watered a minimum of twice daily. • Properly maintain and tune all internal combustion engine powered equipment; • Require employees and subcontractors to comply with 	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
		<p>the CARB idling restrictions for compression ignition engines; and use California ultra-low sulfur diesel fuel; use construction equipment with Tier 2 engines; and use interior and exterior paint with a VOC content of 100 grams per liter.</p>	
<p><i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?</i></p>	<p>Less than Significant Impact. The proposed project would result in significant cumulative impacts if it exceeds daily thresholds of significance established by VCAPCD or if it incurred in an increase of emissions beyond what is planned in the City of Oxnard General Plan. Since the proposed project's long-term emissions are less than established thresholds of significance, and its land use is not anticipated to provide for increase population growth above what is forecasted in the General Plan, the proposed project would not result in a cumulative considerable net increase of any criteria pollutant for which the region is non-attainment. Therefore, the proposed project would have less than significant cumulative impacts.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>Expose sensitive receptors to substantial pollutant concentrations?</i></p>	<p>Less than Significant Impact. The project site is surrounded by residential units in the north, agricultural/open space in the east, and by agricultural land in the south and west. The proposed project is a public school that qualifies as a sensitive receptor (i.e., a facility serving populations likely to suffer adverse health effects from pollution, such as children and the elderly). The location of the project site is not expected to expose students to sources of substantial pollutant concentrations (e.g., industrial facilities emitting odorous or hazardous substances). During construction, construction activities would generate particulate matter emissions resulting from the combustion of diesel fuel by construction equipment. Since nearby residents would be potentially exposed to these emissions a screening health risk assessment was conducted to determine impacts from these emissions. Additionally, operation of the proposed project has the potential to contribute significantly to traffic volumes in the nearby roadway system. Congested intersections have the potential to result in localized high levels of CO, which results from incomplete combustion of carbon containing fuels (e.g., gasoline and diesel). CO exposure can have a significant impact on sensitive receptors. To this end, a CO analysis was</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	conducted for six intersections expected to be impacted by the implementation of the proposed project and no significant impacts associated with CO emissions were found during the analysis. A SHRA was conducted for the proposed project and emissions from construction sources are not anticipated to expose sensitive receptors in the nearby residential area to substantial pollutant concentrations.		
<i>Create objectionable odors affecting a substantial number of people?</i>	Less than Significant Impact. While the project would be adjacent to agricultural fields, the types of crops grown at these field are not anticipated to create objectionable odors in accordance with the listing for odorous land uses prescribed in the Ventura County Air Quality Guidelines. Emissions from construction equipment are not listed either as odorous sources. Thus, the proposed project would not result in objectionable odors affecting a substantial number of people and project impact would be less than significant.	No mitigation is required.	Less than Significant Impact
<i>Cumulative Air Quality Impacts</i>	Less than Significant Impact. The proposed project would not result in significant cumulative impacts since it does not exceed daily thresholds of significance established by VCAPCD or result in an increase in emissions beyond what is planned in the City of Oxnard General Plan and thereby the applicable AQMP. Project contribution toward cumulative impacts would be less than significant.	No mitigation is required.	Less than Significant Impact
3.4 Biological Resources			
<i>Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?</i>	Potentially Significant Impact during Construction. The proposed project site consists of an active agricultural field, and is surrounded by agricultural uses to the west, south, and east, and residential development to the north. No candidate, sensitive, or special-status wildlife or plant species in any local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS were observed during the site visit in July 2017. Additionally, no suitable habitat for these species was found within or directly adjacent to the project site. The ornamental tree stand north of the site and the telephone poles running along the western and southern borders of the site may serve as potential perching or nesting locations for birds. A visual survey of these locations was conducted from the project site during the site visit in July 2017, and no nests were observed. Small numbers of common birds were observed in-flight over the site, including: house sparrow (<i>Passer domesticus</i>), song sparrow (<i>Melospiza melodia</i>),	Mitigation Measure BIO-1 Prior to construction, the general contractor shall have a preconstruction nesting bird survey conducted by a qualified biologist, prior to the use of heavy machinery or significant ground disturbance, at the ornamental tree stand north of the site and at the telephone poles west and south of the site if activities are conducted within the breeding season for birds (February 15 – September 15). If any migratory or federally or state listed species birds are found to be actively nesting within 250 feet of the designated construction area,	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>house finch (<i>Carpodacus mexicanus</i>), American crow (<i>Corvus brachyrhynchos</i>), and turkey vultures (<i>Cathartes aura</i>). A few American crow individuals were observed in the ornamental tree stand north of the project site.</p> <p>No trees or shrubs are present on the project site, and therefore would not be removed as part of the proposed project. Existing ornamental trees and shrubs north of the project site and telephone poles to the west and south may provide suitable nesting bird habitat. Doris Avenue separates the project site from the ornamental tree stand and experiences heavy vehicle traffic. While the potential for significant impacts from project activities is low, the use of heavy machinery or activities that generate significant ground disturbance may disturb nesting birds if present. With implementation of mitigation measure BIO-1, project impact would be reduced to less than significant.</p>	<p>an appropriate exclusionary buffer around the active nest shall be established by the qualified biologist. The buffer distance will be determined based on the specific nesting bird species, and would be maintained until the birds have fledged from the nest. Active nests and buffers would be monitored initially by a qualified biologist to determine if active nests are being adversely affected by project activities.</p>	
<p><i>Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i></p>	<p>Refer to impact discussion under Threshold above.</p>	<p>Refer to Mitigation Measure BIO-1.</p>	<p>Less than Significant Impact</p>
<p><i>Would the project have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the Federal CWA or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?</i></p>	<p>Potentially Significant Impact during Construction. No designated jurisdictional wetlands or wetland habitats are known to occur within or directly adjacent to the project site based on review of the CNDDB and USFWS National Wetlands Inventory (NWI) databases. Agricultural ditches were found along the western and southern site boundaries during the July 2017 site visit. Both ditches are predominantly un-vegetated and heavily disturbed. The western ditch was noted as completely dry and the southern ditch had minor ponding (less than 6 inches of water). Since the ACOE does not typically assert jurisdiction over swales, erosional features, or ditches that were excavated primarily to drain uplands that do not carry a permanent flow of water, neither a CWA Section 401 nor 404 permit is anticipated to be required. Likewise, it is not anticipated that a permit pursuant to Section 1602 of the California Fish and Game Code would be required. However, the ACOE, CDFW, and RWQCB reserve the right to regulate these waters on a case-by-case basis. Therefore, if the ditches are determined to be under the</p>	<p>Mitigation Measure BIO-2 Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the ACOE under CWA Section 404 so that a jurisdictional determination regarding the ditches can be made. If the ACOE determines that any of the ditches are jurisdictional, appropriate authorizations under the Nationwide Permit Program will be implemented. The Project Manager will also seek authorization from the RWQCB under CWA Section 401, if required.</p> <p>Mitigation Measure BIO-3</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	jurisdiction of one or more of these agencies and are affected by project-related activities, then mitigation measures BIO-2 and BIO-3 will be required to reduce project impacts to less than significant.	Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the CDFW under Section 1602 of the California Fish and Game Code so that a jurisdictional determination regarding the ditches can be made. If the CDFW determines that any of the ditches are jurisdictional, a Streambed Alteration Agreement may be required.	
<i>Cumulative Biological Resources Impacts</i>	Less than Significant Impact. Cumulative impacts are incremental effects of an individual project when combined with effects of past, current, and potential future projects. Because the project site is active agricultural land with very little quality habitat surrounding the site, cumulative impacts to biological resources are not anticipated.	No mitigation is required.	Less than Significant Impact

3.5 Cultural and Tribal Cultural Resources

<i>Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?</i>	Less than Significant Impact. The project site lacks any buildings or structures and is currently used for agriculture row crops. The records search and NAHC sacred lands search did not identify any known historical resources within or adjacent to the project APE. One historical resource (P-56-151357) and one potential historical resource (P-56-153056) have been recorded in the study area outside of the APE. However, neither resource is anticipated to be indirectly impacted by the Project due to their distance from the APE. As a result, the proposed project would not cause a substantial adverse change in the significance of a known historic resource as defined in Section 15064.5 of the CEQA Guidelines and no mitigation is required.	No mitigation is required.	Less than Significant Impact
<i>Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?</i>	Potentially Significant Impact. The records search, NAHC sacred land search, and tribal outreach did not identify any archaeological sites within or adjacent to the project APE. Based on a previous geotechnical study (Koury Geotechnical Services, Inc. 2014; Earth Systems Southern California 2017), the project APE is overlain with approximately 0-24 inches of fill soil (agricultural) consisting of silty sand to sandy silt, and the surface soils have been altered by previous agricultural related ground disturbance (disked and plowed) to a depth of approximately 0-30 inches (plow zone). Surface soils consist	Mitigation Measure CUL-1 Worker Environmental Awareness Training: Prior to any proposed construction ground disturbing activities within the Project APE, the District Project Manager will require the construction contractor to provide for all non-cultural resources	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>of silty sand to sandy silt, sandy lean clay, and fine silty sand underlain by alluvial soils. Due to the fill soils mixed by previous agricultural disturbance covering the site and the lack of native soil surface visibility, an archaeological survey was not conducted of the APE. However, the project site is located in an active depositional setting, and buried archaeological (prehistoric or historic) materials may be present in previously undisturbed native soils beneath the fill soils. Disturbance of these intact buried resources would be a significant impact. Incorporation of Mitigation Measures CUL-1 (Worker Environmental Awareness Training) and CUL-2 (Archaeological Monitoring), below, would avoid this significant potential impact on archaeological resources.</p>	<p>personnel to be briefed, by a qualified project archaeologist (retained on-call by construction contractor) about the potential and procedures for an inadvertent discovery of prehistoric and historic archaeological resources. In addition, the training will include established procedures for temporarily halting or redirecting work in the event of a discovery, identification and evaluation procedures for finds, and a discussion on the importance of, and the legal basis for, the protection of archaeological resources. Personnel will be given a training brochure/handout regarding identification of cultural resources, protocols for inadvertent discoveries, and contact procedures in the event of a discovery.</p> <p>Mitigation Measure CUL-2 Archaeological Monitoring Plan and Monitoring: If proposed project construction ground disturbing activities will reach depths containing undisturbed native soils (below 24 inches), the qualified project archaeologist will prepare an archaeological monitoring plan and a qualified archaeological monitor and Native American monitor (if requested) will be present on-site during ground disturbing activities that occur within native soils. If any cultural resources are identified by the monitor(s) during ground disturbing activities, the resource will be treated as an inadvertent discovery and the protocols outlined in the monitoring plan will be adhered to.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
		<p>In general, if cultural resources are encountered during ground disturbing activities in native soils, the archaeological monitor will stop work within 100-feet of the find in order to assess its significance. Construction activities can continue outside the established 100-foot radius exclusion zone. Work may not resume within the 100 feet exclusion zone until the Project Archaeologist can evaluate the significance of the find and complete any necessary recordation and evaluation of the find (may include recording, testing and/or data recovery efforts) in consultation with the Oxnard School District. Construction will not proceed within the 100-foot area around the discovery until the appropriate approvals are obtained. Mr. Patrick Tumamait of the Barbareno Ventureno Band of Mission Indians, requested to be notified in the event of an inadvertent discovery. If requested by interested Tribes, a Native American Monitor will also be present during construction ground disturbing activities. A final report documenting the results of the monitoring program will be prepared by the qualified project archaeologist.</p>	
<p><i>Would the project disturb any human remains, including those interred outside of formal cemeteries?</i></p>	<p>Potentially Significant Impact. There are no known human remains or burials within the project APE. The record search nor the NAHC sacred land file search identified any known burials or recorded human remains. Nonetheless, as with archaeological resources, it is possible that previously unknown human burials or remains could be disturbed on site during project construction. As discussed above, human occupation within the Oxnard Plain has been documented to at least 5000 years ago and likely include the project APE.</p>	<p>Mitigation Measure CUL-1 Worker Environmental Awareness Training: Prior to any proposed construction ground disturbing activities within the Project APE, the District Project Manager will require the construction contractor to provide for all non-cultural resources</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>California state law requires all project excavation activities to halt if human remains are encountered and the County Coroner must be notified. Any discovery of human remains on the project site would be treated in accordance with PRC Section 5097.98 and Section 7050.5 of the State Health and Safety Code. Pursuant to State HSC § 7050.5, if human remains and/or cultural items defined by the Health and Safety Code, Section §7050.5, are inadvertently discovered during construction activities, all work within a 100-foot radius of the find or an area reasonably suspected to overlie adjacent remains (whichever is larger) will cease, the find will be flagged and protected for avoidance, and the Ventura County Coroner will be contacted immediately. The remains must be securely protected and project personnel must ensure confidentiality of the find on a need-to-know basis and ensure that the remains are treated with dignity, not touched, moved, photographed, discussed on social media sources (e.g., Facebook, Twitter), or further disturbed. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the MLD as stipulated by California PRC Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Construction will not proceed within the 100-foot area (or protected area) around the discovery until the appropriate approvals are obtained. Work may be delayed in the vicinity of the human remains up to 30 days.</p> <p>The specific State law/regulations regarding proper handling of previously unknown human remains encountered during construction are specified above and the project will comply with the state law/regulations to avoid significant impacts on human remains. In conjunction with the training and monitoring protocols identified in in Mitigation Measures CUL-1 and CUL-2, potential impacts to unknown human remains is less than significant.</p>	<p>personnel to be briefed, by a qualified project archaeologist (retained on-call by construction contractor) about the potential and procedures for an inadvertent discovery of prehistoric and historic archaeological resources. In addition, the training will include established procedures for temporarily halting or redirecting work in the event of a discovery, identification and evaluation procedures for finds, and a discussion on the importance of, and the legal basis for, the protection of archaeological resources. Personnel will be given a training brochure/handout regarding identification of cultural resources, protocols for inadvertent discoveries, and contact procedures in the event of a discovery.</p> <p>Mitigation Measure CUL-2 Archaeological Monitoring Plan and Monitoring: If proposed project construction ground disturbing activities will reach depths containing undisturbed native soils (below 24 inches), the qualified project archaeologist will prepare an archaeological monitoring plan and a qualified archaeological monitor and Native American monitor (if requested) will be present on-site during ground disturbing activities that occur within native soils. If any cultural resources are identified by the monitor(s) during ground disturbing activities, the resource will be treated as an inadvertent discovery and the protocols outlined in the monitoring plan will be adhered to.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
		<p>In general, if cultural resources are encountered during ground disturbing activities in native soils, the archaeological monitor will stop work within 100-feet of the find in order to assess its significance. Construction activities can continue outside the established 100-foot radius exclusion zone. Work may not resume within the 100 feet exclusion zone until the Project Archaeologist can evaluate the significance of the find and complete any necessary recordation and evaluation of the find (may include recording, testing and/or data recovery efforts) in consultation with the Oxnard School District. Construction will not proceed within the 100-foot area around the discovery until the appropriate approvals are obtained. Mr. Patrick Tumamait of the Barbareno Ventureno Band of Mission Indians, requested to be notified in the event of an inadvertent discovery. If requested by interested Tribes, a Native American Monitor will also be present during construction ground disturbing activities. A final report documenting the results of the monitoring program will be prepared by the qualified project archaeologist.</p>	
<p><i>Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</i></p>	<p>Potentially Significant Impact. In Ventura County, paleontological remains, typically identified in Pleistocene-age alluvial deposits, include examples from throughout most of geological history, including the Paleozoic (600-225 million years ago), Mesozoic (225-70 million years ago) and Cenozoic (70 million years ago-present) eras. Based on the geological map of Ventura County, Oxnard quadrangle, the project site is underlain by Holocene age (10,000 years BP to recent) alluvial fan deposits composed of soils that are</p>	<p>Mitigation Measure CUL-3 Paleontological Resource Impact Mitigation Program: Prior to any ground-disturbing activities, the District Project Manager will require the construction contractor to have a Paleontological Resource Impact Mitigation Program (PRIMP) prepared by a qualified</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>predominately of clay with interbeds of sand and occasional gravel (Koury Geotechnical Services, Inc. 2014, Clahan 2003). Holocene deposits may overlie older alluvium of Pleistocene age (2.6 million years ago to 10,000 years BP). Holocene age deposits are considered to have a low sensitivity for yielding paleontological resources. In 2010, a paleontological record search of the museum collection records maintained by the Natural History Museum of Los Angeles County (NHM) was conducted for the Oxnard Airport Land Easement Acquisition Project, approximately 0.40 miles south of the project site (SWCA 2009). The record search included a one-mile radius around the airport and indicated that no previously identified paleontological localities occurred within the search area, nor had any resources been reported within the same Holocene age geological unit as the current project APE (SWCA 2009). Based on the Holocene-age deposits, surficial ground disturbance is unlikely to encounter or cause a substantial adverse change in significance to a paleontological resource. However, if project ground disturbing construction depths exceed the Holocene age deposits or encounters shallow Pleistocene deposits, paleontological resources may be exposed. Paleontological resources in Ventura County include many widely dispersed outcrops of fossil bearing formations. (Ventura 2011). Incorporation of Mitigation Measure CUL-3 (Paleontological Resource Impact Mitigation Program), below, would avoid this significant potential impact on archaeological resources.</p>	<p>paleontologist if project construction will exceed Holocene soils. The qualified paleontologist will also attend the worker environmental awareness program training and provide information on paleontological resources and a brochure/handout outlining procedures in the event of a paleontological find during construction. The District Project Manager will require the construction contractor to initiate implementation of the PRIMP at the beginning of ground disturbing activities. The PRIMP will address and define the following specific activities and responsibilities:</p> <ul style="list-style-type: none"> • Full-time monitoring by a qualified paleontologist during all grading and excavation extending more than 10 feet (ft) below ground surface (bgs) or beyond Holocene deposits. • Spot-check monitoring by a qualified paleontologist for all grading and excavation between 5 and 10 ft bgs to determine whether older sediments with a potential to contain paleontological resources are present. • Procedures for project personnel and/or paleontological monitor to halt work and temporarily redirect construction away from an area if paleontological resources are encountered during grading or excavation in 	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
		<p>order to assess the significance of the find.</p> <ul style="list-style-type: none"> • Procedures for recommendations regarding level of monitoring effort (e.g., spot check, full-time) depending upon sensitivity of soil depth, identification of finds, etc. • Procedures for handling collected material and curation. • Procedures for reporting and documenting the results of the monitoring program. • Provide brochure of environmental awareness training 	
<p><i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe? and that is:</i></p> <p><i>listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?</i></p>	<p>Less than Significant Impact. The records search, NAHC sacred lands search, and AB 52 consultation did not identify any historical resources within or adjacent to the project APE. The District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. We received one response from Mr. Patrick Tumamait on October 9, 2017 indicating that he would like to be notified in the event of an inadvertent discovery and of any project updates or changes. As a result, it is believed the proposed project would not cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5020.1 (k) and no mitigation is required.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant</i></p>	<p>Less than Significant Impact. The records search, NAHC sacred lands search, and AB 52 consultation between the lead agency and Mr. Morales did not identify any significant tribal cultural resources within or adjacent to the project APE. The</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</i></p>	<p>District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. We received one response from Mr. Patrick Tumamait on October 9, 2017 indicating that he would like to be notified in the event of an inadvertent discovery and of any project updates or changes. As a result, the proposed project is not anticipated to cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5024.1 and no mitigation is required.</p>		
<p><i>Cumulative Cultural Resources Impacts</i></p>	<p>Potentially Significant Impact. Cultural Resources and Tribal Resources</p> <p>Based on the literature and records review (as described above), the project site is in a part of coastal California with documented prehistoric and historic occupation. The cumulative impact study area for cultural resources is coastal Ventura County and the Channel Islands (specifically, the Oxnard Plain), covering areas occupied by Native Americans through historic contact and immigrant populations (e.g. Europeans, Mexicans). Although no historic or archeological resources are documented in the project APE, unidentified buried resources may exist. Varied cultural resources are documented throughout this part of coastal California suggesting it is a highly sensitive region for archaeological resources.</p> <p>The proposed project would not result in impacts to previously documented archeological and historic resources or human burials, but could result in impacts to those types of resources as a result of disturbance of native soils during project construction. This type of impact would be significant. However, with implementation of Mitigation Measures CUL-1, CUL-2 and CUL-3, those impacts would not be significant. As such, the project is not anticipated to contribute significantly to cumulative impacts on cultural resources in the region.</p> <p>Paleontological Resources</p> <p>Project construction excavation exceeding Holocene deposits would potentially result in the unearthing of significant paleontological resources. Those effects would be mitigated through implementation of a PRIMP as detailed in Mitigation Measure CUL-3. In addition, scientific knowledge gained based on the study and evaluation of fossils potentially removed from the cited formations/units during the</p>	<p>Refer to Mitigation Measures CUL-1, CUL-2, and CUL-3.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>construction of the project would be a beneficial effect of the project.</p> <p>The grading and excavation for other projects and development in areas where formations/ units with Pleistocene fossil bearing deposits occur also have the potential to result in the unearthing, removal, and possible destruction of significant paleontological resources from one or more of such fossil bearing deposits. Those effects would also be required to be mitigated through implementation of a similar project-specific PRIMP. In addition, scientific knowledge gained based on the study and evaluation of fossils potentially removed from the cited formations/units during the construction of the cumulative projects would be beneficial effects of those projects. For these reasons, potential cumulative impacts to paleontological resources would be less than significant.</p>		

3.6 Geology and Soils

<p><i>Would the project expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?</i></p>	<p>Potentially Significant Impact. The probable maximum intensity of a seismic event which could affect would be approximately intensity IX on the Modified Mercalli Scale (ESSC 2017). At this level of shaking it is likely that there will considerable damage in specially designed structures; some well-designed frame structures could be thrown out of plumb; and great damage could occur in substantial buildings, with partial collapse possible. This intensity could also result in buildings being shifted off foundations. In addition, there would be great damage to poorly built structures and chimneys, factory stacks, columns, monuments, and free-standing walls would be at great risk of falling beginning at the lesser Intensity Level VIII. The Geotechnical Report Site-Specific Analysis for ground motion calculated estimates of motion for a maximum considered earthquake with a moment magnitude of 7.2 on Oak Ridge fault, which occurs within 2.8-miles of the project site. The Short Period Spectral Response (Sips) was found to be 1.198 g, and the 1 Second Spectral Response (SD1) was found to be 1.312 g. Both the “site specific” and “general procedure yielded peak ground accelerations of 0.873 g. ESSC found that based upon the. Therefore, the findings of the Geotechnical Report show that there is the potential for adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.</p> <p>The potential risks posed by the project from strong seismic ground shaking would be less than significant impacts with mitigation incorporated. Mitigation measure GEO-1 requires</p>	<p>Mitigation Measure GEO-1</p> <p>The building design for structures at the Project shall use geotechnical building design recommendations that are based on a site specific ground motion hazard analysis for the Project site performed in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site specific ground motion hazard analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.</p>	<p>Less than Significant Impact</p>
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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>that the building design for structures at the Project use geotechnical building design recommendations that are based on a site specific ground motion hazard analysis for the Project site in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site specific ground motion hazard analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-1; the project would have a less than significant impact.</p>		
<p><i>Would the project expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?</i></p>	<p>Potentially Significant Impact. The probable maximum intensity of a seismic event which could affect would be approximately intensity IX on the Modified Mercalli Scale (ESSC 2017). At this level of shaking it is likely that there will be considerable damage in specially designed structures; some well-designed frame structures could be thrown out of plumb; and great damage could occur in substantial buildings, with partial collapse possible. This intensity could also result in buildings being shifted off foundations. In addition, there would be great damage to poorly built structures and chimneys, factory stacks, columns, monuments, and free-standing walls would be at great risk of falling beginning at the lesser Intensity Level VIII. The Geotechnical Report Site-Specific Analysis for ground motion calculated estimates of motion for a maximum considered earthquake with a moment magnitude of 7.2 on Oak Ridge fault, which occurs within 2.8-miles of the project site. The Short Period Spectral Response (Sips) was found to be 1.198 g, and the 1 Second Spectral Response (SD1) was found to be 1.312 g. Both the “site specific” and “general procedure yielded peak ground accelerations of 0.873 g. ESSC found that based upon the. Therefore, the findings of the Geotechnical Report show that there is the potential for adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.</p> <p>The potential risks posed by the project from strong seismic ground shaking would be less than significant impacts with mitigation incorporated. Mitigation measure GEO-1 requires that the building design for structures at the Project use geotechnical building design recommendations that are based on a site specific ground motion hazard analysis for the Project site in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site specific ground motion hazard analysis and geotechnical building design recommendations shall be</p>	<p>Refer to Mitigation Measure GEO-1.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-1; the project would have a less than significant impact.		
<p><i>Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?</i></p>	<p>Potentially Significant Impact. Earth Systems Southern California determined that there is no risk from off-site landslide, but liquefaction and differential settlements, ranging up to about 2.0 inches, and potential lateral spreading could occur, up to about 1.3 feet. Therefore, there is a potential that the project would expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure.</p> <p>The potential risks posed by the project from a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant impacts with mitigation incorporated. If Mitigation Measure GEO-2 is implemented it would reduce the potential risks posed by liquefaction, differential settlements, and lateral spreading to a less than significant impact.</p>	<p>Mitigation Measure GEO-2 The building design for structures at the Project shall use geotechnical building design recommendations that are based on a site specific evaluation of the liquefaction potential performed in accordance with the 2013 CBC (CBSC 2016) and the methods in the Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A (CGS 2008). The site specific liquefaction potential analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.</p>	Less than Significant Impact
<p><i>Would the project result in substantial soil erosion or loss of topsoil?</i></p>	<p>Potentially Significant Impact. Soil erosion would potentially occur during construction activities, including site grading, structure assembly, and utility extension. With the implementation of Mitigation Measure GEO-3, this impact would be reduced to a less than significant level with standard erosion mitigation measures, including the use of hay bales and other erosion control devices as determined by site-specific conditions, limiting construction to the dry season, soil wetting, and adherence to applicable regulatory guidelines and standards. These measures would also reduce potential air quality impacts and sedimentation.</p> <p>Once the project is completed, no additional loss of topsoil or erosion would occur as there would be no exposed soils on the project site.</p>	<p>Mitigation Measure GEO-3 Potential soil erosion that would occur during construction activities, including site grading, structure assembly, and utility extension shall be reduced to a less than significant level with standard erosion mitigation measures, including the use of hay bales and other erosion control devices as determined by site-specific conditions, limiting construction to the dry season, and soil wetting, applied as required under applicable regulatory guidelines and standards.</p>	Less than Significant Impact
<p><i>Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating</i></p>	<p>Potentially Significant Impact. Soil testing documented the ESSC Geotechnical Report (ESSC 2017) indicated that shallow subsurface soils (at depths of 0 to 5 feet below ground surface [bgs]) are in the low expansion range (have a UBC Expansion Index [EI] between 21 and 50). Section 10803.2 of</p>	<p>Mitigation Measure GEO-4 Special foundation design procedures in the building design for structures at the Project use the geotechnical building foundation</p>	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<i>substantial risks to life or property?</i>	<p>the 1994 UBC mandates that “special [foundation] design consideration” be employed if the EI is greater than 20 (UBC Table 18-1-B).</p> <p>The potential risks posed by the project from expansive soils would be less than significant impacts with mitigation incorporated. Mitigation Measure GEO-4 requires that special foundation design procedures in the building design for structures at the Project use the geotechnical building foundation design recommendations in the 2017 ESSE Geotechnical Report (ESSC 2017) that are based on a site specific evaluation of the expansive soils potential. The site specific expansive soil analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-4; the project would have a less than significant impact.</p>	<p>design recommendations in the 2017 ESSE Geotechnical Report (ESSC 2017) that are based on a site specific evaluation of the expansive soils potential. The site specific expansive soil analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.</p>	
<i>Cumulative Cultural Resources Impacts</i>	<p>Potentially Significant Impact. The proposed project would result in a less than significant contribution to cumulative impacts on soils and geology. The proposed project and all new building projects within the surrounding study area (City and the County) would be required to comply with the applicable State and local requirements, including, but not limited to, the CBC, and would be required to implement recommendations of a site-specific geotechnical report. Therefore, the project specific impacts, as well as the impacts associated with other projects, would be reduced to a less than significant level. Seismic impacts are a regional issue and are also addressed through compliance with applicable codes and design standards. For these reasons, the project’s contribution to cumulative geotechnical and soil impacts is less than significant.</p>	<p>Refer to Mitigation Measures GEO-1, GEO-2, GEO-3, and GEO-4.</p>	<p>Less than Significant Impact</p>
3.7 Greenhouse Gas Emissions			
<i>Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<p>Less than Significant Impact. The proposed project would generate GHGs during construction and operation activities. GHG emissions generated by the proposed project would not exceed the SCAQMD threshold of 10,000 MT of CO₂e. Therefore, project impacts are considered less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<i>Would the project conflict with any applicable plan, policy, or regulation of an agency adopted</i>	<p>Less than Significant Impact. GHG emissions generated by the proposed project would not exceed the SCAQMD threshold of 10,000 MT of CO₂e. Neither, construction nor operation of the proposed project is expected to conflict with</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<i>for the purpose of reducing the emissions of greenhouse gases?</i>	any applicable plan, policy or regulation of any agency adopted for the purposed of reducing the emissions of greenhouse gases. Therefore, project impacts are considered less than significant.		
<i>Cumulative Greenhouse Gas Emissions Impacts</i>	Less than Significant Impact. The proposed project would contribute GHGs which would add to GHG emitted locally and globally. However, the GHG emissions from the proposed project would not exceed the SCAQMD interim threshold of 10,000 MT per year of CO ₂ e and therefore cumulative project impacts are considered less than significant.	No mitigation is required.	Less than Significant Impact

3.8 Hazards and Hazardous Materials

<i>Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>	<p>Potentially Significant Impact. The proposed project would not create a significant hazard to the public or the environment involving the likely release of hazardous materials. The proposed project would not handle or generate large quantities of hazardous materials. Potential hazardous materials used onsite include those needed during short term temporary construction activities such as architectural coatings and sealants. During long term operations, small quantities of potential hazardous materials stored at the school would include cleaners (e.g., disinfectants, bleach) and office supplies (e.g., toner). As is standard for schools, these materials would be kept in cabinets or supply rooms and therefore, would not be considered a hazard to students, staff, or the public.</p> <p>The project site is located within 1,500 feet of a high pressure natural gas pipeline and a high-volume water pipeline. There is a 10-inch high pressure natural gas pipeline operated by the Southern California Gas Company approximately 1,000 feet south of the proposed project along the south shoulder of Teal Club Road, approximately parallel to the roadway (Ninyo & Moore 2014; Tetra Tech 2017). A high volume municipal water main (12-inch diameter and greater) operated by the City of Oxnard was also identified in the Right of Way beneath Doris Avenue (Tetra Tech 2017).</p> <p>California Code of Regulations (CCR) Title 5, Education Section 14010(h), requires that new school sites shall not be located within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional.</p>	<p>Mitigation Measure HAZ-1 Project development plans shall take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. Land within this area shall be considered for low average occupancy level uses, such as parking lots, or designated as landscaped “buffer” areas.</p> <p>Mitigation Measure HAZ-2 All emergency plan(s) that are prepared for the educational facilities shall identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident.</p>	Less than Significant Impact
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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>A Pipeline Risk Assessment was performed by JHE in August 2017 to evaluate whether the 10-inch diameter SCGC natural gas pipeline or City of Oxnard high volume water pipeline could pose and unacceptable safety hazard to the project site (JHE 2017). The risk analysis was prepared in accordance with guidelines set forth in the February 2007, California Department of Education (CDE) Guidance Protocol for School Site Pipeline Risk Analysis (CDE Protocol) (CDE 2007).</p> <p>The Pipeline Risk Assessment for the natural gas pipeline indicated that the estimated annual individual risk associated with the SCGC 10-inch diameter high-pressure natural gas distribution pipeline is 8.6×10^{-10}, well below the CDE risk threshold for new school facility sites of 1×10^{-6}. Therefore, the population risk indicator for the project site is zero for the high-pressure natural gas pipeline and the high-pressure natural gas pipeline is not considered to pose an unacceptable safety hazard for school facility development at the proposed educational facilities site (JHE 2017).</p> <p>The high-volume water pipeline risk analysis indicated that in the unlikely event of failure of the City of Oxnard municipal water distribution pipeline located within the Doris Avenue right-of way, portions of the project site could be subject to physical impact and sheet flow runoff. This east-west trending pipeline is located approximately 5 feet north of the northern boundary of the project site. Physical impacts would be greatest within approximately 25 feet of the pipeline alignment. Released water would be expected to flow across much of the project site. However, the depth of water would not be expected to exceed 0.5 to 1.0 feet and potential inundation at the project site is not, therefore, considered to pose a significant safety hazard.</p> <p>JHE recommended that site development plans take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. The conceptual site plan is consistent with this recommendation with the nearest structure (Administrative Building) located 37 feet from Doris Avenue. Nonetheless, Mitigation Measure HAZ-1 has been added that requires areas in closest proximity to the high-volume water pipeline to be considered for low average occupancy level uses, such as parking lots, or designated as landscaped "buffer" areas. This mitigation measure was added to ensure that final project</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>design maintains an adequate setback distance from the high-pressure water pipeline.</p> <p>To provide an added degree of risk management, Mitigation Measure HAZ-2 has been added that requires any emergency plan documents that are prepared for the educational facilities to identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident. With implementation of mitigation measures HAZ-1 and HAZ-2 project impact would be less than significant.</p>		
<p><i>Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?</i></p>	<p>Potentially Significant Impact.</p> <p><u>Pesticide Hazards</u></p> <p>Historical and current use of the property have been for agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in the surface soils. Based on the fact that future development of the property includes planned school sites, large areas of the site are scheduled to be disturbed by demolition, grading, and reconstruction. These activities may result in the completion of ingestion, inhalation, and dermal exposure pathways via wind-blown dust, soil carried to different parts of the site by heavy equipment, and adhesion to site worker clothing.</p> <p>A Screening Health Risk Assessment was performed as part of the PEA to estimate non-carcinogenic and carcinogenic human health risks posed by OCP and arsenic concentrations in soil in accordance with EPA and DTSC guidance (ATC 2017a). The PEA Screening Health Risk Assessment for human health effects involves identifying potential chemicals of concern, and comparing a calculated dose for these chemicals to health-based levels developed by EPA and DTSC. For the PEA screening evaluation, the Screening Health Risk Assessment evaluated potential exposures, doses, and risks for four potential onsite receptors, including hypothetical resident, future school worker, future student, and construction worker exposure scenarios. For this analysis, the Screening Health Risk Assessment was performed utilizing data obtained from the December 2016 site assessment.</p> <p>Exposure to chemicals can only occur if there is a complete pathway by which chemicals in site soil, water, or air can be contacted by humans. Therefore, the evaluation of exposure pathways is the first step in the human health screening</p>	<p>Mitigation Measure HAZ-3</p> <p>A Land Use Covenant shall be prepared, approved by DTSC, recorded with the County of Ventura Recorder's Office and implemented in accordance with DTSC requirements. This Land Use Covenant will insure that the project site's future use is restricted to non-residential purposes.</p> <p>Mitigation Measure HAZ-4</p> <p>During grading and project construction activities the DTSC approved SMP shall be implemented to the satisfaction of DTSC.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>evaluation. Potential dose and risk are then calculated based on an evaluation of potential exposure concentrations of chemicals of concern, and the toxicity of the chemicals.</p> <p>Following development, it is anticipated that only limited portions of the site would be exposed and available for contact by future students and school workers. The potential for direct contact with soil under anticipated future site conditions is expected to be minimal. Consistent with agency guidance for baseline risk assessments, it was assumed that the site will be uncovered and that bare soils will be available for contact for the purpose of the screening human health evaluation. Consequently, children attending the school, certain school staff, and workers engaged in construction activities could potentially be exposed to site chemicals through incidental ingestion, dermal contact, and inhalation of vapors and particulates from chemicals in soil.</p> <p>Chemicals of Potential Concern (COPCs) include constituents that are present in soil that may result in adverse health effects under the defined conditions of exposure. The PEA sampling activities included analysis for arsenic, a naturally-occurring element that may also be associated with historical arsenic based pesticides, and organochlorine pesticides (OCPs). The Screening Health Risk Assessment concluded that the estimated upper-bound hazard indices for non-carcinogenic human health risk are 0.2 for the hypothetical future site resident, 0.014 for the site worker, 0.067 for the construction worker, and 0.019 for the student. The results of the Screening Health Risk Assessment indicated that the presence of OCPs in soil is not expected to result in adverse, non-cancer health impacts to any of the potential receptors evaluated.</p> <p>Estimates of potential cumulative upper-bound lifetime incremental cancer risks ranged from 6.3×10^{-6} for the hypothetical future resident to 2.6×10^{-7} for the construction worker scenarios. The lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} typically utilized by DTSC to determine whether a removal action is warranted to protect human health for unrestricted land uses. Upper-bound lifetime incremental cancer risk estimates for the school site receptors are 1.3×10^{-6} for the site worker, 2.6×10^{-7} for the construction worker, and 6.9×10^{-7} for the student. The lifetime incremental cancer risk estimates are consistent with of below the DTSC's 1×10^{-6} point of departure for the site worker, site student, and</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>construction worker. Based on the results of the Screening Health Risk Assessment, the concentrations of OCPs, including toxaphene, detected in soil samples collected during this investigation would pose a significant risk to the hypothetical future resident but do not present a significant risk to future site workers, students or construction workers. While no residential uses are proposed as part of the project, the Screening Health Risk Assessment did indicate that the lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} utilized by DTSC. In the event that unrestricted (residential) use of the property is desired, consideration should be given to performing removal or remedial actions designed to reduce the concentrations of toxaphene in soil to levels that are suitable for residential use.</p> <p>In a letter dated May 4, 2017, DTSC approved the PEA report requiring that a Land Use Covenant (LUC) be implemented to limit the project site's future use to non-residential purposes and a Soil Management Plan (SMP) be prepared to protect site workers during grading operations (DTSC 2017a). A SMP was prepared, dated May 17, 2017 (ATC 2017b), that should be implemented during grading activities at the project site. DTSC approved the SMP in a letter dated June 14, 2017 (DTSC 2017b). Mitigation Measure HAZ-3 has been incorporated to ensure that the LUC be prepared and implemented under DTSC oversight to the satisfaction of DTSC. Mitigation Measure HAZ-4 has been incorporated to ensure that the SMP is implemented to the satisfaction of DTSC. With compliance with Mitigation Measures HAZ-3 and HAZ-4, the project impact would be less than significant.</p> <p><u>Potential Soil Gas Hazard</u></p> <p>The PEA found levels of methane in soil gas that would not result in significant impacts to any receptors for the proposed project (ATC 2017a). The maximum detection of methane in soil gas (15.26 ppmv) fell at a level far below the LEL. Therefore, soil gas emissions from the underlying oil field or nearby high pressure natural gas pipelines do not pose a significant impact to the project site. Therefore, project impact would be less than significant.</p>		
<p><i>Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government</i></p>	<p>Less than Significant Impact. The project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, no project impact would result.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</i></p>			
<p><i>Would the project be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?</i></p>	<p>Significant Adverse Impact. The proposed project lies within the Oxnard Airport SOI and the site's southern and northern boundaries lie approximately 1,800 feet and 2,700 feet, respectively, from the runway centerline. Decisions regarding development projects near airports should not be taken lightly as aircraft accidents can have disastrous implications. Consequently, agencies at federal, state and local levels have developed various criteria to help guide local planning agencies in their decision-making (Heliplanners 2017). The project site does not lie within the areas addressed by planning standards published by the FAA in its Airport Design advisory circular. Caltrans Aeronautics Division recommended exploring other sites further from the runway, but does not recommend against the proposed site based on their evaluation of existing conditions. The California Airport Land Use Planning Handbook discourages schools within the Traffic Pattern Zone, but does not prohibit them. The handbook's recommendations within specific zones are not meant to override local Airport Land Use Commission findings. The Ventura County Transportation Commission (VCTC) acts as the County's Airport Land Use Commission (ALUC) per state law. The VCTC is charged with reviewing land use proposals within certain planning boundaries, with the goal of promoting compatibility between airport operations and nearby land uses. These boundaries are defined in the Commission's Airport Comprehensive Land Use Plan (CLUP) for Ventura County. The project site lies within the Traffic Pattern Zone (TPZ) defined by the CLUP. According to the CLUP adopted land use compatibility standards in safety zones for civilian airports (CLUP Table 6B), schools are an unacceptable use in the TPZ. The VCTC, acting as the Airport Land Use Commission for Ventura County has the responsibility of making an official finding of consistency or inconsistency. In a letter addressed to Caltrans Division of Aeronautics, dated July 23, 2014, the VCTC found the proposed project to be inconsistent with the CLUP, and stated concerns related to the students' safety in the event of an aircraft accident on site. The County of Ventura Department of Airports also found the school site to be unacceptable as proposed, referencing</p>	<p>No mitigation is feasible for airport hazards. Mitigation Measure HAZ-5 is for an obstruction evaluation. Prior to completion of final design, plans shall be submitted to the FAA for an obstruction evaluation to determine if buildings and other elements (including construction activities) would penetrate the FAR Part 77-specified "notice surface."</p>	<p>Significant Unavoidable Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>CLUP considerations, noise, and safety. (August 8, 2014) Should the School District choose to pursue the site, the Department of Airports requests that an aviation easement be granted as a condition of development. They requested that the easement require parent notification of proximity to the airport and the associated traffic pattern, noise, and safety hazards therein. OSD is tentatively agreeable to granting such an easement subject to the District’s formal legal review and concurrence.</p> <p>An analysis of imaginary surfaces defined in FAR Part 77 indicates that the proposed structures within the Doris Avenue/Patterson Road Education Facilities Project would likely comply with all relevant criteria and would not be considered obstructions or hazards to aviation. However, the project must be submitted to the FAA for an obstruction evaluation prior to construction because buildings and other elements would penetrate the FAR Part 77-specified “notice surface”, which represents a threshold level for FAA review. This can normally be done as a blanket application covering the entire proposed development, provided structural heights are known (or covered from a conservative “worst case” perspective). Attention should be given to locations and heights of trees (at maturity) and powerlines, light standards, etc. once that information is available. Proactive measures can normally be taken to ensure that these items will not violate FAR Part 77 criteria. Mitigation Measure HAZ-5 has thereby been added to ensure compliance with FAR Part 77 requirements.</p> <p>An aircraft accident can occur at any time and at any place. An accident within or near the project site could involve an aircraft taking off from or landing at Oxnard Airport or it could involve an aircraft enroute between two other airports, with no connection to Oxnard Airport. There is no way to completely guard against such occurrences. We can, however, assess the relative probability of an accident occurring within a specific area. One method of estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years. However, there are no “standards” that specifically address this issue. Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.</p> <p>The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the “worst case scenario” project impact from airport hazards would therefore be considered potentially significant and unavoidable.</p>		
<p><i>Cumulative Hazards and Hazardous Materials Impacts</i></p>	<p>Significant Adverse Impact. The proposed project would result in a less than significant contribution to cumulative impacts on hazardous materials. The proposed project and all new building projects within the surrounding study area (City and the County) would be required to comply with the applicable State and local requirements, including, but not limited to, the DTSC, CDE, FAR, Caltrans DOA, Ventura County, and the City of Oxnard, and would be required to implement recommendations of the site-specific PEA Report and associated DTSC approval letters, and the PRA Report. The proposed project would contribute to the cumulative effect of reduction in potential emergency landing areas surrounding Oxnard Airport. However, lands north and west of the airport are devoted to agricultural or open space uses within the San Buenaventura-Oxnard Greenbelt, which is protected from future development. Those lands would therefore remain available for emergency landings if needed. As noted above, the City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). Therefore, in order to account for the “worst case scenario” project impact from airport hazards would therefore be considered potentially significant and unavoidable.</p>	<p>No mitigation is feasible for airport hazards.</p>	<p>Significant Unavoidable Impact</p>
<p>3.9 Hydrology and Water Quality</p>			
<p><i>Would the project violate any water quality standards or waste discharge requirements?</i></p>	<p>Construction would disturb approximately 25 acres. During construction, pollutants of concern include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Additionally, excavated soil would be exposed, so there would be an increased potential for soil erosion compared to existing conditions. Lastly, chemicals,</p>	<p>Mitigation Measure HYDRO-1 If perched groundwater is encountered during construction, the OSD shall apply for coverage under the Los Angeles RWQCB’s Groundwater Discharge Permit,</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>petroleum products (such as paints, solvents, and fuels), and concrete-related waste could spill or leak and have the potential to be transported via storm runoff into downstream receiving waters (ultimately the Pacific Ocean). Since the project will disturb greater than one acre of land, the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, the project a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment controls designed to minimize erosion and retain sediment on site, and good housekeeping BMPs intended to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Prior to terminating coverage under the Construction General Permit, the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity. The proposed project includes a mix of landscaping and hardscape, which will prevent any increase risk of sediment discharge.</p> <p>Due to the depth to groundwater (14-21 feet bgs) on-site, it is not anticipated that the groundwater table would be encountered during excavation. However, perched groundwater may be encountered in localized areas during excavation and may require dewatering. Groundwater may contain high levels of total dissolved solids and other constituents that could be introduced to surface waters. Any groundwater dewatering performed during excavation would be completed in accordance with the Los Angeles RWQCB's Groundwater Discharge Permit. This permit requires testing and treatment (as necessary) of groundwater prior to its discharge off-site. If perched groundwater is encountered during construction, under Mitigation Measure HYDRO-1, the OSD shall apply for coverage under the Los Angeles RWQCB's Groundwater Discharge Permit, and adhere to the permit provisions therein to ensure that the project would not violate any water quality standards or waste discharge requirements.</p> <p>During operation of the proposed project (new elementary school, middle school, District administrative center), pollutants of concern include sediments, nutrients, metals, pesticides, organic materials/oxygen-demanding substances, oil and grease/organics associated with petroleum, bacteria and viruses, and trash and debris (gross solids and floatables). Additionally, the proposed project would result in a</p>	<p>and adhere to the permit provisions therein.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>permanent increase in impervious surface area of 13.96 ac. An increase in impervious area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. Prior to terminating coverage under the Construction General Permit and pursuant to the Ventura County TGM (2015), the project site must implement storm water control measures that treat post-construction runoff (i.e., water quality, flow, and volume).</p> <p>Storm water control measures that would be incorporated into the design of the proposed project to treat storm water runoff include a dry extended detention basin coupled with hydrodynamic separation devices to target pollutants of concern for the project site (Phoenix Civil Engineering, Inc. [Phoenix] 2017). The Ventura County TGM describes dry extended detention basins as having outlets designed to detain the stormwater quality design volume for 36 to 48 hours to allow sediment particles and associated pollutants to settle and be removed. Dry extended detention basins do not have a permanent pool and are designed to drain completely between storm events (2015). The Ventura County TGM describes hydrodynamic separation devices as devices that remove trash, debris, and coarse sediment from incoming stormwater flows using screening, gravity settling, and centrifugal forces. Hydrodynamic separation devices can achieve significant removal of suspended sediments and attached pollutants with less space as compared to wet vaults and other settling devices. Hydrodynamic devices can remove trash, debris, and other coarse solids down to particles the size of sand. Several types of hydrodynamic separation devices can also remove floating oils and grease using sorbent media (2015).</p> <p>The southern portion of the Site is planned to be soccer fields totaling 6.7 acres. The anticipated project design includes depressing the soccer fields 8-inches below the surrounding grade, or conversely an 8-inch tall earthen berm would be constructed along the western, eastern and southern boundaries to collect and detain Site stormwater runoff. At that depth, the soccer fields would collect 195,640 cubic feet (4.5-acre feet) of runoff, which could be detained for up to two days. Stormwater runoff in excess of this capacity would be released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Drainage System Master Plan (Phoenix 2017). Preliminary calculations performed by Phoenix indicate that 5-acre feet of runoff would be generated by a 100-year storm event (2017). The project site could</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>detain that volume with only 0.5-acre feet of runoff discharged offsite.</p> <p>The proposed parking lots would drain to the dry extended detention basins sited within the soccer fields. Runoff from the parking lots would be filtered by hydrodynamic separation devices to remove trash, debris and oil/petroleum products prior to its discharge to the dry extended detention basins. Each parking lot will have one hydrodynamic separation device for treating its runoff (Phoenix 2017).</p> <p>Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017). All stormwater control measures will be designed according to the requirements of the Ventura County TGM (2015) and would target pollutants of concern from the project site.</p> <p>The project would connect to the existing sanitary sewer main which conveys domestic wastewater to the Oxnard Wastewater Treatment Plant (OWTP). The OWTP, owned and operated by the City of Oxnard, is a secondary treatment facility located at 6001 South Perkins Road, Oxnard, California (Oxnard Public Works 2015). The OWTP treats and discharges wastewater pursuant to National Pollutant Discharge Elimination System Order No. R4-2013-0094, adopted by the Los Angeles RWQCB on June 6, 2013. The new elementary and middle school, and District administrative center would generate domestic wastewater from restroom and food service facilities, as well as from science labs, which would be treated by the OWTP. The curriculum associated with the science labs would not generate and/or discharge any hazardous wastes to the sanitary sewer.</p> <p>With compliance with existing regulations including implementation of storm water BMPs that target pollutants of concern in runoff from the project site, implementation of mitigation measure HYDRO-1, and connection to the OWTP, the potential for violation of water quality standards or waste discharge requirements and degradation of water quality would be less than significant.</p>		
<p><i>Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater</i></p>	<p>Less than Significant Impact. During construction, it is not anticipated that the groundwater table, which is 14-21 feet bgs, would be encountered during excavation. However, perched groundwater may be encountered in localized areas during excavation and may require dewatering. Any groundwater dewatering performed during excavation would</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?</i></p>	<p>be temporary, not result in a substantial volume removed, and completed in accordance with the Los Angeles RWQCB's Groundwater Discharge Permit. Grading and construction activities would compact soil, and construction of structures would increase impervious area, which can decrease infiltration during construction. However, construction activities would be temporary, and the reduction in infiltration would not be substantial relative to Semi-Perched Zone or the UAS and LAS that are the principal groundwater sources for the Oxnard Plain Groundwater Basin. The UAS and LAS are recharged through infiltration in the Oxnard Forebay area, located approximately two miles northeast of the proposed project area. Therefore, construction of the proposed project would not substantially deplete groundwater or interfere with groundwater recharge such that there would be net deficit in aquifer volume or a lowering of the local groundwater table level. Construction impacts related to groundwater supplies would be less than significant, and no mitigation is required.</p> <p>The City of Oxnard would provide water for the proposed project. The City of Oxnard obtains water from local groundwater, groundwater from the United Water Conservation District (UWCD), and imported water from Calleguas Municipal Water District (CMWD). The City of Oxnard's historical water supply has fluctuated between 26,919 and 28,826-acre feet per year or an upper limit of 25 million gallons per day (Phoenix 2017). The projected water supplies in the City of Oxnard 2015 Urban Water Management Plan are 40,341-acre feet for 2020, 54,341-acre feet for 2025, 2030, 2035, and 2040 (MNS Engineers, Inc. 2016).</p> <p>The City of Oxnard 2030 Master Plan indicates that the City has already exceeded the reduction limits established by the State of California 2010 Urban Water Management Plan (UWMP) assuming the mandated 132 gallons per capita per day (gpcd) value was used. The use of the mandated consumption value for planning purposes was conservative (City of Oxnard 2011). The proposed school project would comprise approximately 178,678 square feet (sq. ft.) of building and structures, including joint-use facilities to support a district office, and 220 parking spaces for 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. A variety of play fields and recreational areas would accommodate the recreational needs of the K-8 students onsite (Tetra Tech 2017).</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>The OSD institutes a standard educational schedule, resulting in approximately 181 school days. Applying an average demand factor of 5.4 gallons per student per school day (Mays 2001), the project would require an additional 1,857,060 gallons of water annually (5.7 acre-feet/year - AFY) (Tetra Tech 2017). It is assumed that the projection of 5.4 gallons per student per school day includes irrigation. It is total water demand (Phoenix 2017).</p> <p>The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. Because this value is considered conservative (it equates to three times the amount of demand compared to the Initial Study figure), it was used to estimate project water consumption in the Water Resources System Analysis Report prepared for the project site (Phoenix 2017).</p> <p>Water for the proposed project would be supplied by the City of Oxnard from an existing 12-inch diameter potable water pipeline that is located within Doris Avenue that extends west from Ventura Avenue to the intersection of Doris Avenue and Patterson Road. It supplies water to the residential tract to the north of the project. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows;</p> <ul style="list-style-type: none"> • School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gallons per day); and • Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gallons per day). <p>That equates to approximately 2,450 gallons per hour (19,500 gallons/8 hours) assuming an 8-hour day for school occupancy and that the irrigation activities will occur during an 8-hour period at night. The school will be sufficiently supplied by the existing 12-inch diameter water pipeline for this flow rate.</p> <p>Therefore, water supply demand impacts related to groundwater supplies would be less than significant, and no mitigation is required.</p>		
<p><i>Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the</i></p>	<p>Less than Significant Impact. No perennial or ephemeral water bodies are located on or close to the site; therefore, the project would not alter the course of a stream or river. During construction activities, the project site would be graded and</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?</i></p>	<p>excavated, exposing soil and increasing the potential for soil erosion compared to existing conditions. During a storm event, soil erosion and sedimentation could occur at an accelerated rate. For example, excavation activities result in soil stockpiles, which has the potential to be washed into storm drains, blown off-site by wind, or tracked off site by heavy equipment. In addition, construction activities would compact soil, and construction of structures would increase the impervious area, which can increase runoff during construction. Since the project will disturb greater than one acre of land, the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment controls designed to minimize substantial erosion or siltation. Prior to terminating coverage under the Construction General Permit, the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity. The proposed project includes a mix of landscaping and hardscape, which will prevent any increase risk of sediment discharge. Implementation of the site-specific SWPPP during construction activities would reduce the potential for erosion and siltation to less than significant levels. Currently, storm water flows from the Site discharge to an open unlined drainage ditch that runs west to Victoria Avenue along the north side of Teal Club Road, before discharging to the West Fifth Street Drain. The West Fifth Street Drain ultimately discharges to the Edison Canal which is an intake canal to the Mandalay Generating Station owned by NRG Energy. The proposed on-site uses (new elementary school, middle school, District administrative center) would change on-site drainage patterns by adding impervious surface areas, including buildings and parking lots, and constructing drainage structures. The proposed project is anticipated to install curb and gutter improvements along the north and south sides of the parcel. There would be an access road on the east side of the project site and that paved road is anticipated to have curb and gutter along the west side. These curb and gutter facilities would route stormwater run-on around the site. Additionally, the 2003 Drainage System Master Plan recommended improvements in the area of the Project including storm drainage piping on the east side of Patterson Road from Doris</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Avenue to Teal Club Road. The proposed facilities are a 30-inch diameter reinforced concrete pipe extending approximately to the southern boundary of the proposed project, and a 36-inch diameter reinforced concrete pipe extending to approximately 250 feet from the intersection with Teal Club Road. At Teal Club Road, the storm drainage system would transition to a 42-inch diameter reinforced concrete pipe. These facilities have not been constructed (Phoenix 2017).</p> <p>The proposed project would result in a permanent increase in impervious surface area of 13.96 ac. An increase in impervious area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. Prior to terminating coverage under the Construction General Permit and pursuant to the Ventura County TGM (2015), the project site must implement storm water control measures that treat post-construction runoff (i.e., water quality, flow, and volume). Storm water control measures that would be incorporated into the design of the proposed project to treat storm water runoff include a dry extended detention basin coupled with hydrodynamic separation devices to target pollutants of concern for the project site (Phoenix 2017). Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017). Through a combination of these stormwater control measures, both on-site and off-site flooding will be controlled. These stormwater controls would also prevent on-site and off-site erosion and siltation.</p> <p>There are no on-site streams or rivers; therefore, the project would not alter the course of a stream or river. Although the existing drainage pattern of the site would be substantially altered, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation or flooding on- or off-site with compliance with existing regulations. Operational impacts related to on- or off-site erosion, siltation, and flooding would be less than significant, and no mitigation is required.</p>		
<p><i>Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial</i></p>	<p>Less than Significant Impact. During construction, the proposed project has the potential to introduce pollutants into the storm water drainage system from erosion, siltation, and accidental spills. Additionally, grading and construction activities would compact soil, and construction of buildings</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>additional sources of polluted runoff?</i></p>	<p>and parking lots would increase impervious area, which will increase runoff during construction. Lastly, dewatering of perched groundwater could introduce groundwater containing high levels of total dissolved solids and other constituents to surface waters. Since the project would disturb greater than one acre of land the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would be implemented to reduce impacts to water quality, including impacts associated with erosion, siltation, spills, and increased runoff. Additionally, any groundwater dewatering would be performed according to the Los Angeles RWQCB's Groundwater Discharge Permit, which would require testing and treatment, as necessary. The potential volume of groundwater discharged during construction can't be estimated at this time, but would not be substantial and is not anticipated to exceed the capacity of downstream storm water drainage systems. Compliance with the Construction General Permit and Groundwater Discharge Permit requirements would reduce the potential for off-site discharge of substantial additional sources of polluted runoff to less than significant levels. Furthermore, compliance with these permits would also prevent the discharge of runoff in excess of existing and planned storm water drainage systems to less than significant levels.</p> <p>The proposed on-site uses (new elementary school, middle school, District administrative center) would increase impervious surface area and runoff from the Site, but the proposed on-site dry extended detention basin would be designed to conform with the standards in the Ventura County TMG, thereby reducing the effective impervious area of the Site to no more than 5 percent of the project area (Phoenix 2017). Additionally, the proposed project anticipates having to install new 30-inch and 36-inch diameter storm drainage piping infrastructure along Patterson Road from the Site to the existing Teal Club Road facility as documented in the City of Oxnard Drainage System Master Plan. Off-site discharges would be less than the capacity of anticipated storm drainage piping along Patterson Road (Phoenix 2017). Lastly, the project includes basins and hydrodynamic separation devices to treat storm water runoff from the Site during operation. Therefore, with implementation of BMPs, operational impacts related to exceedance of the capacity of and providing</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	additional sources of polluted runoff to storm water drainage systems would be less than significant.		
<i>Would the project otherwise substantially degrade water quality?</i>	Less than Significant Impact. There are no project elements that have not already been considered in the previous analyses that would substantially degrade water quality. Construction activities would adhere to requirements of the Construction General Permit, including development of a site-specific SWPPP and implementation of BMPs that target potential pollutants and additional runoff generated by construction activities. Potential groundwater dewatering activities will comply with the Groundwater Dewatering Permit, which directs testing and treatment (as necessary) of groundwater prior to its discharge off-site. Post-construction storm water and wastewater would be treated by on-site drainage controls and the OWTP, respectively. Therefore, with compliance with existing regulations project impact would be less than significant.	No mitigation is required.	Less than Significant Impact
<i>Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?</i>	Less than Significant Impact. FIRM Panel 06111C0905E (FEMA 2010) indicates that the project area is within shaded Zone X, an area with a moderate risk of flooding, typically between the limits of the 100-year and 500-year floods. This zone is also used to “designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile” (FEMA, 2012). Because the project area is outside the 100-year flood zone, buildings and residents onsite would not be placed within a flood hazard area. Additionally, the project would not involve placing structures that would impede or redirect flood flows within a 100-year flood hazard area. Therefore, the proposed project would not place within a 100-year flood hazard area structures that would impede or redirect flow and project impact would be less than significant.	No mitigation is required.	Less than Significant Impact
<i>Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?</i>	Potentially Significant Impact. In Ventura County, disaster coordination and planning is the responsibility of the Ventura County Sheriff’s Department OES. Within California’s emergency management organizational structure, each county serves as an Operational Area. In this role, Sheriff’s OES acts as an agent between Cal OES and the cities (including the City of Oxnard), special districts and unincorporated areas of Ventura County. OES is responsible for countywide disaster planning, mitigation, response and recovery activities. The	Mitigation Measure HYDRO-2 The OSD shall develop and implement a site evacuation plan to be implemented in conjunction with the County of Ventura OES Dam Failure Response Plan.	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>OES serves as the depository for the County's Dam Inundation Maps and is charged with ongoing maintenance of the County's Dam Failure Response Plan which was adopted by the Board of Supervisors on September 13, 1983. The Dam Failure Response Plan was currently updated by the OES during 2013 (County of Ventura 2013). With compliance with Mitigation Measure HYDRO-2, that requires OSD to develop and implement a Site-specific flooding evacuation plan to be implemented in conjunction with the County of Ventura OES Dam Failure Response Plan, project impacts would be less than significant.</p>		
<p><i>Cumulative Hydrology and Water Quality Impacts</i></p>	<p>The proposed project is within the City of Oxnard's sphere of influence and the development of the project area was accounted for in the City's 2030 General Plan. The proposed project would increase impermeable surface area in the City. The proposed project and other incremental development would potentially increase peak flood flows, alter drainage patterns, reduce groundwater recharge, and increase pollutants in the regional stormwater. These effects could occur during construction and operation of planned or pending projects. The proposed project and each of the cumulative projects would be subject to California, Ventura County, and the City of Oxnard requirements including the State of California Construction General Permit (CGP), the NPDES and MS4 Permit, the 2011 Ventura County Technical Guidance Manual for Stormwater Quality Control Measures. In addition, Los Angeles RWQCB Groundwater Discharge Permit requirements would be imposed for construction dewatering. Each project would be required to develop a SWPPP and Storm Water Pollution Control Plan and would be evaluated individually to determine appropriate BMPs to minimize impacts to surface water quality. Thus, the project's contribution to cumulative impacts to hydrology and surface water quality would be less than significant.</p>		

3.10 Land Use Planning

<p><i>Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning</i></p>	<p>Less Than Significant Impact. The District would process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</i></p>	<p>use permit (Oxnard Municipal Code Section 16-257). With the approval of the GPA, Pre-Zone, and Annexation, the proposed project would be consistent with the General Plan and zoning land use designations.</p> <p>The <i>Airport Comprehensive Land Use Plan (CLUP)</i> for Ventura County adopted land use compatibility standards in safety zones for civilian airports (Table 6B), establishes land uses within each of the three safety zones at Oxnard Airport. Schools, under the subcategory of Public/Institutional land uses, are classified as “Unacceptable” within the Traffic Pattern Zone. As required by Public Utilities Code Section 21675, the proposed project would be submitted to the ALUC for review. If the commission determines that the proposed project is inconsistent with the CLUP, OSD would be notified. OSD after a public hearing, can propose to overrule the commission by a two-thirds vote if it makes specific findings that the proposed project is consistent with the purpose of this article. Therefore, in order to be constructed, the proposed project would require either a finding of consistency by the ALUC with the CLUP or OSD would need to overrule the commission by a two-thirds vote with applicable findings.</p> <p>The proposed project would require annexation into the City of Oxnard. Annexation of the project area to the City would require LAFCo approval of several changes of organization, collectively called reorganization. As part of the reorganization process, sphere of influence amendments will also be needed. The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed project will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council’s public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services.</p>		
<p><i>Cumulative Land Use</i></p>	<p>Less than Significant Impact. The proposed project, and future projects, would be required to comply with applicable land use regulations in order to be granted needed discretionary land use approvals for construction and</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>operation. The project site is located within an area that was planned for future development in the City of Oxnard 2030 General Plan and within the CURB. The proposed project is a similar use to what was proposed in the 2030 General Plan and includes the necessary land use actions as part of the project to bring the project in compliance with City of Oxnard General Plan and zoning land use designations. Aside from the impacts associated with agricultural conversion, project contribution to a cumulative land use impact would thereby be considered less than significant.</p>		
3.11 Noise			
<p><i>Would the project expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?</i></p>	<p>Less Than Significant Impact. The City of Oxnard General Plan Noise Element identifies land use compatibility standard for noise-sensitive land uses as a CNEL of 55 dBA to 70 dBA as conditionally acceptable. No ambient noise monitoring data have been identified for the Project vicinity, but existing land use patterns and street patterns indicate within the City of Oxnard’s Noise Element that the existing ambient noise levels should be below the CNEL standard of 65 dBA at the project site and adjacent properties. The construction of the proposed school site would have only a minimal impact on daily traffic volumes in the project vicinity, and thus would have minimal impact on traffic noise conditions.</p> <p>The City of Oxnard’s Code of Ordinances Chapter 7 Section 7-185 limits noise propagation to residential land uses from stationary equipment during the daytime period (7:00 am to 10:00 pm) to 55 dBA Leq and during the nighttime period (10:00 pm to 7:00 am) to 50 dBA Leq. The Project consists of the construction and operation of a new elementary, middle school, and District administrative center on a 25-acre site. This proposed facility will include twelve new buildings, which include rooftop HVAC units. The classrooms would be designed and constructed to have a Community Noise Equivalent Level of 45 dB or less.</p> <p>The HVAC units will be surrounded by a parapet wall. According to the manufacturers, the sound power levels for the packaged air conditioning units are 89 dBA. Given the elevated rooftop height for the mechanical equipment and assuming the rooftop mechanical equipment operates simultaneously, the noise levels from the operation of all the rooftop mechanical equipment would range from 46 dBA Leq at the single family residential homes located to the northwest near the intersection of Doris Avenue and Patterson Avenue,</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>to 49 dBA Leq at the single family residential homes located directly north across Doris Avenue. Existing classrooms are located directly north adjacent to the proposed classroom building. The noise levels generated by the proposed Project will comply with the City of Oxnard's General Plan and Code of Ordinances. Therefore, project impact is less than significant.</p>		
<p><i>Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?</i></p>	<p>Less Than Significant Impact. Operation of the school would not generate vibration; however, construction of the classroom buildings and site grading as well as infrastructure improvements and utility connections would require the use of equipment that could generate vibration. Possible sources of vibration may include bulldozers, dump trucks, backhoes, rollers, and other construction equipment that produces vibration. No blasting will be required at the project site. Project construction activities would occur within approximately 50 feet from the nearest signal family residence. According to FTA guidelines, a vibration level of 78 VdB (Vibration Velocity Level) is the threshold of perceptibility for humans. For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (Federal Transit Administration 1995). Based on the levels published by the FTA (Federal Transit Administration 2006) and the type of equipment proposed for use at the proposed Project, coupled with the distance to the existing identified noise sensitive receptors, analysis shows that the vibration levels maybe perceptible at the nearest sensitive receptors, but will be below the maximum vibration level of 80 VdB. This vibration level is considered acceptable for impacts to sensitive receptors. Therefore, project impact is less than significant impact.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</i></p>	<p>Less Than Significant Impact. The dominant noise sources in the vicinity of the proposed Project site is traffic noise associated with Doris Avenue and North Patterson Road. Based on existing traffic volumes, noise impacts to adjacent residences range from 57 dBA CNEL to 64 dBA CNEL. The Project would result in an increase in traffic along Doris Avenue and North Patterson Road during the arrival and departure of students. The Project traffic analysis identifies an increase of 3,600 Average Daily Trips (ADT). Doris Avenue ADT will increase with 53 percent (1,900 ADT) of the Project related ADT, and North Patterson Road ADT will increase with 47 percent (1,700 ADT) of the Project related ADT. This</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>increase in ADT represents an increase of less than 2 dBA at the residences adjacent to the proposed project. According to the CEQA guidelines, an increase in the overall ambient community noise level of less than 2 dBA is considered to be a less than significant impact.</p> <p>The Project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the Project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 169 based aircraft and approximately 74,157 operations for calendar year 2016 (Ventura County 2017). The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site is located just outside of the 60 dBA CNEL contour. Therefore, the noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and with typical educational facility construction with windows closed, interior noise levels from aircraft operations are expected to achieve 45 dBA CNEL or less, which achieves both the State and City interior noise requirements. Therefore, noise impacts from the Oxnard Airport are considered to be less than significant.</p> <p>This proposed facility will include 12 new buildings, which include rooftop heating, ventilation, and air conditioning (HVAC) units. The HVAC units will be surrounded by a parapet wall. The noise levels from the operation of all the rooftop mechanical equipment would range from 46 dBA Leq at the single family residential homes located to the northwest neat the intersection of Doris Avenue and Patterson Avenue, to 49 dBA Leq at the single family residential homes located directly north across Doris Avenue. Based on the existing noise levels generated by vehicle traffic, the noise impacts from the rooftop mechanical equipment would result in an increase of less than 1 dBA to the ambient noise levels at the adjacent residential property lines. Since the proposed Project is shown to only increase the overall ambient community noise level by less than one dBA, project impact would be less than significant impact.</p>		
<p><i>Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</i></p>	<p>Potentially Significant Impact. Construction of the proposed K-5 and 6-8 schools are planned to start in 2019. All project construction activities including those for the Administrative Facilities are anticipated to be completed by the start of the 2021-2022 school year. The Project construction activities are anticipated to occur in phases and include site preparation,</p>	<p>Mitigation Measure N-1 Construction noise levels fluctuate depending on the construction phase, equipment type and duration of use; distance between noise source and sensitive</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>grading, building construction, paving, architectural coating, and landscaping. These construction activities would require a variety of equipment. Typical construction equipment would not be expected to generate noise levels above 90 dBA at 50 feet, and most equipment types would typically generate noise levels of less than 85 dBA at 50 feet.</p> <p>The highest noise levels during construction are normally generated during site grading and foundation work. Grading equipment would be the loudest equipment used at the site. This equipment is expected to generate a maximum instantaneous noise level (Lmax) of up to 75 - 80 dBA at the single family homes located at a distance of 100 feet. This would be loud enough to temporarily interfere with speech communication outdoors and indoors with the windows open. Project construction would occur between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday. Project construction will also implement standard noise reduction measures. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction, and the implementation mitigation measure N-1, the temporary increase in noise due to construction is considered to be a less than significant impact.</p> <p>Infrastructure improvements and utility connections are expected to occur as part of the proposed project. These include roadway improvements and site required utility connections. Roadway improvements include the widening of both Doris Avenue and Patterson Road as well as traffic signing and striping. Electrical and water lines are located on the south side of Doris Avenue and sewer lines are located down the center of Patterson Road. The final locations of the utility connections were not known at the time of this study. However, construction for both the roadway improvements and utility connections are expected to occur on the south portion of Doris Avenue and along Patterson Road south of Doris Avenue. These construction operations could occur within 50 feet of single family residential home and could result in noise levels (Lmax) of up to 80 - 85 dBA. These construction operations would incorporate mitigation measures N-1 to reduce the construction noise levels. Therefore, the increase in noise due to the infrastructure and utility related activities is considered to be less than significant.</p>	<p>receptor; and the presence or absence of barriers between noise source and receptors. Therefore, the Project proponent should require construction contractors to limit standard construction activities as follows:</p> <ul style="list-style-type: none"> • Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. In addition, the time allowed for equipment and trucks to idle will be limited to the extent practicable. • Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible. • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically- 	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
		<p>powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible. This could achieve a reduction of 5 dBA. Quieter procedures shall be used such as drilling rather than impact equipment whenever feasible.</p> <ul style="list-style-type: none"> • Heavy construction equipment operations should be limited during the school period when classrooms are being utilized in the adjacent building. • When heavy construction activities are located within 75 feet of a residential structure deploy a temporary portable sound barrier between the construction activities and nearest sensitive receptor. 	
<p><i>Would the project be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?</i></p>	<p>Less Than Significant Impact. The Project site is located within the Oxnard Airport sphere of influence (SOI). The airport runway midfield point is located approximately 1,800 feet south of the Project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 169 based aircraft and approximately 74,157 operations for calendar year 2016 (Ventura County 2017). The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>is just outside of the 60 dBA CNEL contour. The noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and is consider acceptable for the proposed land use based on the land use compatibility within the City of Oxnard General Plan Noise Element. Therefore, noise impacts from the Oxnard Airport are considered less than significant.</p>		
<p><i>Would the project expose non-human species to excessive noise?</i></p>	<p>No Impact. As indicated in section 3.4, Biological Resources, no candidate, sensitive, or special-status wildlife or plant species in any local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS were observed during the site visit in July 2017. Additionally, no suitable habitat for these species was found within or directly adjacent to the project site. Therefore, the proposed project would not expose non-human species to excessive noise levels.</p>	<p>No mitigation is required.</p>	<p>No impact</p>
<p><i>Cumulative Noise Impacts</i></p>	<p>Less than Significant Impact. Cumulative projects include the effects of existing, current and reasonability foreseeable future projects. The reasonability foreseeable future projects within the vicinity of the proposed project include the Teal Club Specific Plan. Buildout of the City's SOI area including the project site, was accounted for in the City's 2030 General Plan Program EIR (SCH 2007041024) that concluded that General Plan buildout could result in some noise related impacts that would be significant and unavoidable (Oxnard 2009). These impacts include exposing a variety of noise sensitive land uses to traffic noise, railroad noise, and/or excessive groundborne vibration or groundborne noise levels. The 2030 General Plan EIR also concluded that other potential noise impacts could be mitigated through the implementation of regulatory controls and measures present in the City Noise Ordinance and other policies (Oxnard 2017). The proposed project is a similar land use development scenario to what was anticipated in the 2030 General Plan under buildout conditions for the project site. As noted above, the proposed Project is shown to only increase the overall ambient community noise level by less than two dBA and would not expose persons to or generate excessive groundborne vibration or groundborne noise. Therefore, project cumulative impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
3.12 Population			
<i>Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?</i>	Less than Significant Impact. The City of Oxnard has identified the requirement for identifying public facility service areas for existing and planned schools (City of Oxnard 2011). The construction and operation of the educational facilities is not a housing project. The project would generate a minor number of jobs that may be filled by the existing labor pool or from outside sources. The student population would be part of the existing and projected growth impact would be less than for the city. In general, K-12 schools accommodate growth as a result of other land use decisions in the City such as the construction of new homes. The project site is within the City of Oxnard SOI and is adjacent to a fully developed residential development to the north. Buildout of this SOI was accounted for in the City's 2030 General Plan. The school facilities would require utility improvements to connect the site as well as internal improvements. As these facilities would accommodate existing and projected growth and the requirement for local schools, an indirect impact related to growth inducement would not occur. Therefore, project significant	No mitigation is required.	Less than Significant Impact
<i>Cumulative Population Impacts</i>	Less than Significant Impact. The proposed project would not add a substantial number of new jobs. The students and staff attending the school facilities are included in existing and forecasted population growth for the City of Oxnard. The proposed project would support existing and future students and infrastructure improvements would not indirectly cause an increase in population growth. Therefore, project contribution for a cumulative impact would be less than significant.	No mitigation is required.	Less than Significant Impact
3.13 Public Services			
<i>Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for</i>	Less than Significant Impact. <u>Fire Protection</u> The proposed project includes reorganization that would include annexation into the City of Oxnard and detachment from the Ventura County Fire Protection District. Oxnard Fire Department provides fire protection to the City. The proposed project would be designed and constructed to meet required fire standards that would include adequate emergency vehicle access. Construction would comply with the Occupational Safety and Health Administration (OSHA) and Fire and Building Codes.	No mitigation is required.	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
<p><i>any of the following public services:</i> <i>Fire Protection?</i> <i>Police Protection?</i></p>	<p>Operation of the school facility is anticipated to generate a typical range of service calls including fire suppression, emergency medical and emergency rescue requests for service. Fire station 1 located at 491 South “K” Street is within 1.7 miles and fire station 4 located at 230 West Vineyard Avenue within 3.2 miles of the project area are close enough to provide fire protection services in within a reasonable response time. The Oxnard Fire Department has provided an estimate that the response time from Fire Station 1 to the corner of Doric Avenue and Patterson Road is approximately 2-minutes, 27-seconds. The response from Fire Station 4 to the corner of Doric Avenue and Patterson Road is approximately 4-minutes 22-seconds (Oxnard Fire Department 2017). Therefore, with compliance with existing regulations, project impact on fire protection services would be less than significant.</p> <p><u>Police Protection</u> The District and its program manager shall direct the contractor to properly fence the site during construction of the school facilities. The fence will help to reduce the potential for materials and equipment to be targets of theft that could result in a need for increased police services during construction.</p> <p>During operation, the school facilities would be within the service boundary of the Oxnard Police Department. The school facilities are proposed to accommodate both existing and anticipated future enrollment. Public funds such as property taxes would be used to cover the incremental costs associated with providing police services for future enrollment at the facilities. The project would not require the expansion of existing police facilities or the construction of new facilities. As a result, the proposed project would result in a less than significant impact related to police protection during construction and operation of the proposed project.</p>		
<p><i>Cumulative Public Services Impacts</i></p>	<p>Less than Significant Impact. <u>Fire Protection</u> The project area would be annexed into the City of Oxnard. As a result, the area for cumulative analysis for fire protection is the City of Oxnard. The proposed project would cause an incremental increase demand on fire protection services. Consistent with General Plan Policies ISC-1.1, ISC-1.2, ISC-1.3 and ISC-1.4, as development in the area occurs, impact fees specific to fire protection would be required and available for allocation by the City of Oxnard to the City of Oxnard Fire</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Department to ensure adequate levels of service (City of Oxnard 2011).</p> <p><u>Police Protection</u></p> <p>The project area would be annexed into the City of Oxnard. As a result, the area for cumulative analysis for police protection is the City of Oxnard. The proposed project would cause an incremental increase demand on police protection and would add both students, employees and increased traffic that could hinder emergency response. As development in the area occurs, impact fees specific to police protection would be required and available for allocation by the City of Oxnard to the City of Oxnard Police Department to ensure adequate levels of service (City of Oxnard 2011).</p>		
3.14 Transportation and Traffic			
<p><i>Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</i></p>	<p>Potentially Significant Impact. Existing Plus Project Traffic Impacts</p> <p>Traffic impacts were analyzed based on the existing plus project condition in an effort to determine whether the additional trips generated by the proposed project would result in significant impacts to the study intersections.</p> <p>The Intersection Capacity Utilization/Delay for the existing plus project traffic conditions have been calculated are shown in Table 3 in the TIAR. Existing plus project morning and evening peak hour intersection turning movements are shown on Figures 20 and 21 in the TIAR.</p> <p>The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for existing plus project traffic conditions, except for the following three study intersections: Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for existing plus project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>According to the City of Oxnard criteria, Level of Service C during the peak hours is considered the worst acceptable Level of Service for an intersection. A project causes a significant impact if it contributes 0.02 or more to the Intersection Capacity Utilization value at an intersection</p>	<p>Mitigation Measure TRAF-1 Victoria Avenue (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department for intersection improvements at Victoria Avenue (NS) at Doris Avenue (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.</p> <p>Mitigation Measure TRAF-2 Victoria Avenue (NS) at Teal Club Road (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department for intersection improvements at Victoria (NS) at Teal Club Road (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>operating at Level of Service C or worse during the peak hours. If the addition of project traffic volumes increases by 0.02 or more at an intersection operating at Level of Service C or worse, it should be mitigated to the Level of Service identified without the addition of the project volumes.</p> <p>The project trips significantly impact the following three study intersections for existing plus project traffic conditions as shown in Table 4 in the TIAR: Victoria Avenue (NS) at: Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7.</p> <p>Traffic signals are projected to be warranted at the following two intersections for the existing plus project traffic conditions as shown in Appendix D in the TIAR: Victoria Avenue (NS) at Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. Therefore, Mitigation Measures TRAF-2 and TRAF-4 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>Opening Year (2020) Traffic Impacts</p> <p>The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2020) without project traffic conditions, except for the following three study intersections as shown in Table 5 in the TIAR: Victoria Avenue (NS) at: Gonzales Road (EW) – #1, Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2020) without project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>Opening Year (2020) With Project Traffic Impacts</p> <p>The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2020) with project traffic conditions, except for the following three study intersections as shown in Table 6 in the TIAR: Victoria Avenue (NS) at: Gonzales Road (EW) – #1, Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2020) with project traffic conditions. Therefore, Mitigation Measures TRAF-1 and</p>	<p>any portion of 2020 school development.</p> <p>Mitigation Measure TRAF-3 Patterson Road (NS) at Doris Avenue (EW). Implement improvements on Patterson Road between Doris Avenue and Teal Club Road to widen this roadway segment to local arterial standards. The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City’s Traffic Engineering Department based on the project’s trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2025 Phase 2 Teal Club development.</p> <p>Mitigation Measure TRAF-4 Patterson Road (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City’s Traffic Engineering Department based on the project’s trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.</p>	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>TRAF-2 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>The project trips significantly impact the following two study intersections for Opening Year (2020) with project traffic conditions as shown in Table 7 in the TIAR: Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3.</p> <p>Interim Year (2021) Traffic Impacts</p> <p>The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) without project traffic conditions, except for the following four study intersections as shown in Table 8 in the TIAR: Victoria Avenue (NS) at: Gonzales Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3 and 5th Street (EW) – #4. With improvements, these four study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) without project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>Interim Year (2021) With Project Traffic Impacts</p> <p>The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) with project traffic conditions, except for the following six study intersections as shown in Table 9 in the TIAR: Victoria Avenue (NS) at: Gonzales Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at: Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10. With improvements, these six study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) with project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than a significant level.</p> <p>The project trips significantly impact the following five study intersections for Interim Year (2021) with project traffic conditions as shown in Table 10 in the TIAR: Victoria Avenue (NS) at: Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at: Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10.</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Alternative Transportation (Public Transit, Bicycle, and Pedestrian)</p> <p>The study area is currently served by Gold Coast Transit Routes 19, 20, and 21. Routes 19 and 20 travel along Gonzales Road, Victoria Avenue, and 5th Street. Route 21 travels along Victoria Avenue. Gold Coast Transit would continue to provide bus service to the study area with the proposed project. In addition, OSD provides school buses to transport students to and from school. The new schools would also be designed to include bicycle racks for students and staff who chose to bike to school. Currently, there are sidewalks along the northern side of Doris Avenue. Sidewalk improvements adjacent to the educational facilities are anticipated as part of the proposed project which would result in a beneficial impact by improving pedestrian facilities in the area. Therefore, project impacts on public transit, bicycle, or pedestrian facilities would be less than significant.</p> <p>Parking</p> <p>A total of 220 parking spaces are proposed for the proposed project and will meet City of Oxnard parking rate requirements. A District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. A parking lot with 42 spaces would be provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces would be provided within the drop-off and pick-up area to the west. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pickup area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed new access road is expected to terminate at the southernmost access to the parking lot for the school. Based on a proposed parking supply of 220 spaces, adequate parking would be provided for the District office, elementary school, and middle school.</p> <p>Incorporation of Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4 would reduce all potentially significant impacts</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	related to transportation and traffic to a less than significant level.		
<i>Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i>	Less than Significant Impact. The proposed project would be designed and constructed to meet required standards. Sight distance at the project accesses would comply with standard California Department of Transportation and City of Oxnard sight distance standards. The final grading, landscaping, and street improvement plans would demonstrate that sight distance standards are met. Such plans would be reviewed by the City and approved as consistent with this measure prior to issuance of the grading permits. No slope or object over 30 inches would be in the line of sight area. Per the TIAR, there would be no increase in hazards due to a design feature or incompatible uses. Therefore, with compliance with existing regulations, project impact would be less than significant and no mitigation is required.	No mitigation is required.	Less than Significant Impact
<i>Would the project result in inadequate emergency access?</i>	Less than Significant Impact. The proposed project would not restrict or reduce emergency access to the project site. The proposed project would be designed and constructed to meet required standards including adequate emergency access. All driveways would be designed according to City standards to facilitate emergency vehicle access. As part of standard development procedures, site plans would be submitted for review and approval to ensure adequate emergency access prior to construction. Therefore, with compliance with existing requirements, project impact would be less than significant and no mitigation is required.	No mitigation is required.	Less than Significant Impact
<i>Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</i>	Less than Significant Impact. The proposed project would be designed and constructed to meet required standards including adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The study area is currently served by Gold Coast Transit Routes 19, 20, and 21. Routes 19 and 20 travel along Gonzales Road, Victoria Avenue, and 5th Street. Route 21 travels along Victoria Avenue. Gold Coast Transit would continue to provide bus service to the study area with the proposed project. In addition, OSD provides school buses to transport students to and from school. Due to the fact that existing Gold Coast Transit routes in the vicinity of the proposed project are operating within capacity and additional ridership resulting from project implementation could be accommodated, no	No mitigation is required.	Less than Significant Impact

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>significant impacts to public transportation services are anticipated.</p> <p>Patterson Road currently provides an existing Bicycle Facility – Class II (north of Doris Avenue) and is proposed to provide a recommended Bicycle Facility – Class II (south of Doris Avenue). Doris Avenue is proposed to provide a recommended Bicycle Facility - Class II (east of Patterson Road). Figure 10 in the TIAR identifies the proposed bicycle and pedestrian facilities from the City of Oxnard Bicycle & Pedestrian Facilities Master Plan (February 2011). The educational facilities would also be designed to include bicycle racks for students and staff who chose to bicycle to school.</p> <p>Currently, there are sidewalks along the northern side of Doris Avenue. Sidewalk improvements adjacent to the educational facilities are anticipated as part of the proposed project which would result in a beneficial impact by improving pedestrian facilities in the area. This would allow students and staff to safely walk to/from the educational facilities and the surrounding neighborhood.</p> <p>Therefore, project impact on public transit, bicycle, or pedestrian facilities would be less than significant and no mitigation is required.</p>		
<p><i>Cumulative Transportation and Traffic Impacts</i></p>	<p>Potentially Significant Impact. The Opening Year (2020) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been “conservatively” added to the traffic volume forecasts. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM.</p> <p>The Interim Year (2021) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been “conservatively” added to the traffic volume forecasts. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM.</p> <p>The cumulative impacts and mitigation measures for the Existing Plus Project Traffic Conditions, Opening Year (2020) With Project Traffic Conditions and Interim Year (2021) With Project Traffic Conditions are discussed in Section 3.14.2.5.</p>	<p>Refer to Mitigation Measures TRAF-1, TRAF-2, TRAF-3 and TRAF-4.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>The County of Ventura also administers a traffic impact mitigation fee program to address the cumulative adverse impacts of development on the County's road network. As the City of Oxnard currently has a reciprocal agreement with the County, the Oxnard School District would be required to pay both City and County of Ventura traffic mitigation fees to mitigate for project related contributions to the City and regional road network.</p>		
<p>3.15 Utilities and Service Systems</p>			
<p><i>Would the project exceed wastewater treatment requirements of the applicable regional water quality control board?</i></p>	<p>Less than Significant Impact. The proposed project would generate an estimated 5,130 gallons of domestic wastewater per day with an approximate flow rate of 10.7 gpm. The domestic wastewater would flow to the OWTP, where it would be treated pursuant to the Los Angeles RWQCB requirements. The OWTP has a current capacity of 31.7 mgd with average daily flows of approximately 24.0 mgd. Therefore, the OWTP has sufficient treatment capabilities to address domestic wastewater from the proposed project. The proposed project would not exceed wastewater treatment requirements of the applicable regional water quality control board and project impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i></p>	<p>Less than Significant Impact. The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. Water for the proposed project would be supplied by the City of Oxnard from an existing 12 inch diameter potable water pipeline that is located within Doris Avenue that extends west from Ventura Avenue to the intersection of Doris Avenue and Patterson Road. It supplies water to the residential tract to the north of the project. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows;</p> <ul style="list-style-type: none"> • School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gallons per day [gpd]); and • Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gpd). <p>That equates to approximately 2,450 gallons per hour (19,500 gallons/8 hours) assuming an 8-hour day for school occupancy and that the irrigation activities will occur during an</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>8 hour period at night. The school would be sufficiently supplied by the existing 12-inch diameter water pipeline for this flow rate. No additional pipeline improvements are needed for the potable water system (Phoenix 2017).</p> <p>Project Memorandum (PM) 2.3 of the City of Oxnard, Public Works Integrated Master Plan (Master Plan) (Carollo Engineers 2015) describes the impacts to the City’s water distribution system associated with the projected fire flow demands city-wide. For fire flow for the proposed school, the Master Plan assumed that the facility will be constructed using fire sprinklers. Table B105.1 in the California Building Code (CBC, 2016) indicates that a fire flow of 3,000 gallons per minute for 3 hours is required for a building with construction Type IIA (commonly found in new school buildings). A 3,000 gpm flow rate yields a velocity of 8.5 feet per second (fps). Although this is slightly more than the recommended maximum of 7 fps, the duration is short. Therefore, the existing pipeline is adequate for the potable water and firefighting demands of the school. No additional offsite pipeline infrastructure is required to meet the fire demands of the proposed project (Phoenix 2017).</p> <p>The proposed project has the capability of taking recycled water from the City’s Phase 1A backbone system pipeline located along N. Ventura Road for irrigation use. The pipeline originates at the Advanced Water Purification Facility (APWF) in the southern area of Oxnard that extends to the River Park development at the north end of the City. PM 4.2 of the Master Plan (Carollo Engineers 2015), indicates that the backbone pipeline as 14.5 inches in diameter. The OSD could offset the irrigation demand of the project by extending the recycled water infrastructure to the project site, requiring a pipeline approximately 3,300 feet long. An 8-inch diameter pipeline would be required to meet the proposed project irrigation demands (Phoenix 2017; Carollo Engineers 2015).</p> <p>The project site is approximately 25 acres in size with irrigated areas accounting for approximately 12.8 acres or 48% of the site area. The irrigation demands for existing and future developments are identified in the Master Plan (Carollo Engineers 2015) with magnitudes greater than the proposed project. Assuming a 50% indoor/50% outdoor use split, the irrigation demand would be 750 gpd/ac (1,500 gpd/ac listed in the Master Plan for schools divided by 2), which equates to a potential recycled water demand for the school site of 3.5 AFY (3 irrigation days per week for 40 weeks – assumed due to mild climate over 12.8 acres</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>converted to AFY). This would require a recycled water pipeline extension from N. Ventura Ave to the project site to serve recycled water to the irrigation system. This would reduce the proposed project potable water demand by 61% (3.5/5.7 AFY) (Phoenix 2017; Carollo Engineers 2015).</p> <p>The OWTP has a current capacity to treated 31.7 mgd of wastewater with average daily flows of approximately 24.0 mgd. The City anticipates expansion of the plant to 39.7 mgd by 2020. There currently is and will be sufficient capacity to accommodate the wastewater flows from the proposed school project, as well as from other planned developments (Kennedy/Jenks Consultants, 2007). Therefore, the City of Oxnard has adequate capacity to serve the additional wastewater flow that is anticipated from the proposed project and project impact would be less than significant.</p>		
<p><i>Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</i></p>	<p>Less than Significant Impact. The 2003 Drainage System Master Plan identified the necessary storm drain infrastructure needed to serve the Teal Club Specific Plan area that includes the project site. This was prior to the implementation of the MS4 requirements in the late 2000s. Those requirements further restricted developments from direct discharge of storm water without treatment and/or detention or retention onsite (Phoenix 2017).</p> <p>The 2003 Drainage System Master Plan recommended improvements in the area of the project Site including storm drainage piping on the east side of Patterson Road from Doris Avenue to Teal Club Road. The proposed facilities are a 30-inch diameter reinforced concrete pipe extending approximately to the southern boundary of the proposed project, and a 36-inch diameter reinforced concrete pipe extending to approximately 250 feet from the intersection with Teal Club Road. At Teal Club Road, the storm drainage system would transition to a 42-inch diameter reinforced concrete pipe. These facilities have not been constructed (Phoenix 2017).</p> <p>The proposed project would incorporate the requirements of the Ventura County TGM (2015), including the detention of the anticipated storm flows generated from certain storm events as well as proprietary filtration systems as part of the post construction best management practices. Onsite hydrodynamic treatment systems will treat the storm water prior to discharge to the offsite system. The proposed project anticipates having to install the identified storm drainage</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p> piping infrastructure along Patterson Road from the Project site to the existing Teal Club Road facility. The proposed 25-acre project site would include approximately 12.8 acres of pervious areas (48 percent of the site area, with the remainder comprised of hardscape (pavement, parking lots, and structures). Curb and gutter improvements would be installed along the north and south sides of the project site. A paved access road would be installed along on the east side of the project site with curb and gutter along the west side. These improvements would route storm water around the parcel from adjacent areas. Post construction BMPs would be employed to manage the storm flows generated by the hardscape project areas. Storm water improvement at the project site would be designed in accordance with the Ventura County TGM (2015). BMPs such as a dry extended detention basin coupled with hydrodynamic separation devices for the parking lot areas will be used (Phoenix 2017). The following 24-hour rainfall events for the project site area are listed in the 2017 Ventura County Hydrology Manual: <ul style="list-style-type: none"> • 10 year = 4.01 inches; • 25 year = 4.81 inches; • 50 year = 5.39 inches; and • 100 year = 5.97 inches (Phoenix 2017). Soccer fields occupying an area of 6.7 acres are planned for the southern portion of the project site. The soccer fields would be constructed to collect and detain the storm runoff from the project area by being depressed 8 inches below the surrounding grade or conversely an 8-inch-tall earthen berm would be constructed along the western, eastern and southern boundaries. The soccer field area would capable of collecting 195,640 cubic feet (4.5 acre feet) of runoff. This runoff could be detained for up to two days and then the remainder released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Drainage System Master Plan. Preliminary calculations indicate that 5 acre feet of runoff would be generated by a 100 year storm event. The project site could detain that volume with only 0.5 acre feet of runoff discharged off-site (Phoenix 2017). The parking lot areas would drain to the soccer field detention areas. Storm water runoff from the parking lot areas would be filtered to collect the trash, debris and oil/petroleum products </p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>out of the runoff prior to discharge onto the soccer field detention areas. Each parking lot area would have an individual device for treating storm water runoff from that specific area. The hydrodynamic filter systems will be identified as part of the project design efforts. Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017).</p> <p>Since buildout of the project site was anticipated in the 2003 Drainage System Master Plan and would fulfill the requirements of MS4, the proposed project would not result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects and project impact would be less than significant.</p>		
<p><i>Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?</i></p>	<p>Less than Significant Impact. The City of Oxnard would provide water for the proposed project as part of annexation to the City. The City of Oxnard obtains water from local groundwater, groundwater from the UWCD, and imported water from CMWD. The City of Oxnard’s historical water supply has fluctuated between 26,919 and 28,826 acre feet per year or an upper limit of 25 million gallons per day (Phoenix 2017). The projected water supplies in the City of Oxnard 2015 Urban Water Management Plan are 40,341 acre feet for 2020, and 54,341 acre feet for 2025, 2030, 2035, and 2040 (MNS Engineers, Inc., 2016).</p> <p>The CMWD is a wholesale supplier of water to the City of Oxnard. CMWD purchases water from the Metropolitan Water District of Southern California (MWD). Through annexation to the City of Oxnard, the project would be annexed to CWMD and therefore to the MWD as well, and MWD’s approval of the annexation is required (CMWD 2016).</p> <p>Land on which the proposed projects would be built is not presently within the boundaries of CMWD or MWD. The Administrative Codes of both agencies state that water delivered by their systems may be used only within their respective service area boundaries. CMWD purchases all of its potable water from MWD. MWD supplies water from the Colorado River and the State Water Project for municipal, industrial and agricultural uses within its service area. Annexation to CMWD and MWD of the land under consideration is necessary to allow annexation to and water service by the City of Oxnard (CMWD 2017).</p>	<p>No mitigation is required</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>Annexation procedures for MWD are defined in Section 3500 of the Metropolitan Water District Act, which are also observed by CMWD. In addition, annexations to CMWD are subject to Part 8 of CMWD’s Administrative Code. Annexation is also subject to approval by the Ventura Local Agency Formation Commission and any terms and conditions the Commission may apply. Pursuant to Section 56017 of Part 1, Chapter 2, of the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, annexation means the annexation, inclusion, attachment, or addition of territory to a city or district. This action will require amendment of the Spheres of Influence of CMWD and MWD (CMWD 2017). CMWD and MWD have in place Water Standby Charges. In the course of annexation, such charges will be fixed for the subject property. Water Standby Charges are assessed to pay for the benefits that properties receive from the projects and facilities provided by CMWD and MWD, whether or not they receive water from CMWD and MWD (CMWD 2017).</p> <p>This administrative change in water service areas would have a less than significant impact (CMWD 2017).</p> <p>The City of Oxnard 2030 Master Plan indicates that the City has already exceeded the reduction limits established by the State of California 2010 Urban Water Management Plan (UWMP) assuming the mandated 132 gallons per capita per day (gpcd) value was used. The use of the mandated consumption value for planning purposes was conservative (City of Oxnard 2011).</p> <p>The project site is currently in active agriculture use and is planted with row crops. The estimated annual water demand for property with similar agricultural use is approximately 3.2 AFY per acre (Milner-Villa 2014). The proposed project is 25 acres. Therefore, the estimated current agricultural water demand for the project site is 80 AFY. This current demand is served by private wells located on the property.</p> <p>The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows:</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<ul style="list-style-type: none"> • School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gpd); and • Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gpd) (Phoenix 2017). <p>Using the City of Oxnard 2030 Master Plan assumptions presented above and assuming a standard school year education schedule of 181 days, the school site building/hardscape water usage would be 19,500 gpd x 181 days per year = 3,529,500 gallons per year (10.8 AFY). Assuming that the irrigated areas of the school required irrigation 3 days per week for 40 weeks per year, the irrigated area water usage would be 18,000 gpd x 3 days/week x 40 weeks/year = 2,160,000 gallons per year (6.6 AFY). The total estimated annual project water usage would be 17.4 AFY, which is 22 percent of the current estimated water demand under agricultural land use of 80 AFY.</p> <p>The City of Oxnard’s Water Neutrality Policy was first established in 2008 and reaffirmed in 2011. The Water Neutrality Policy requires that all new development approved within the City must offset the water demand associated with the project with a supplemental water supply. As noted above, “new development” includes all planned (anticipated in the 2030 General Plan) and any unplanned future development occurring in the City. Under the policy, a development can be water neutral by meeting its projected demand through: existing FCGMA groundwater allocations that are transferred to the City; contributing to increased efficiency by funding water conservation or recycled water retrofit projects; providing additional water supplies; or any combination of these options. While this City policy has not been codified, it has been applied to every development project approved since 2008.</p> <p>The City of Oxnard’s Water Neutrality Policy would require the OSD to demonstrate access to water supplies that meets or exceeds projected demands. The proposed project would achieve neutrality through contributing water rights, water supplies, or financial or physical offsets to the City of Oxnard that would ensure adequate water supply to address Project water demands. This may be achieved through transfers of FCGMA groundwater allocations to the City of Oxnard through agricultural conversion, contributing to expansions of the City’s recycled water system through physical or financial contributions, and participation in water conservation projects</p>		

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>that produce measurable sustainable water savings. Non-potable water demands, to be met with City recycled water, would be separate. A primary goal is to ensure that the proposed project water supplies consist of 100 percent local and sustainable sources including local groundwater and recycled water.</p> <p>The OSD anticipates compliance with the City's Water Neutrality Policy. The OSD will transfer groundwater allocations to the City upon final approval of the project. The FCGMA Ordinance Code allows an allocation of 2 acre-feet per year per acre for converting historical agricultural groundwater allocations to municipal allocations (FCGMA Ordinance Code, Section 5.3.3). In addition, the conversion rate of 2 acre-feet per year is also subject to a reduction of 25% as per FCGMA Ordinance Code, Section 5.4. Therefore, the applicant will transfer approximately 37.5 AFY to the City (25 ac project area x 2 AFY/ac x 0.75). This transfer of historical groundwater extraction allocations is greater than the total estimated annual project water demand (i.e., 17.4 AFY). Therefore, the project would have sufficient water supplies available to serve the project from existing entitlements and resources the project impact would be less than significant.</p>		
<p><i>Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</i></p>	<p>Less than Significant Impact. The OWTP has a current capacity to treated 31.7 mgd of wastewater with average daily flows of approximately 24.0 mgd. The City anticipates expansion of the plant to 39.7 mgd by 2020. There would be sufficient capacity to accommodate the wastewater flows from the proposed project, as well as from other planned developments (Kennedy/Jenks Consultants, 2007). Therefore, project impact would be less than significant.</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>
<p><i>Cumulative Utilities and Service Systems Impacts</i></p>	<p>Less than Significant Impact. The analysis provided is cumulative in nature and considers the demand for water from existing and future development in the City. The planned sources of water supply would be sufficient to accommodate projected citywide demand; therefore, the cumulative impacts to water supply would not be significant. Additionally, the proposed project and all future development projects in the City will be required to comply with standard water conservation requirements of the City, State, and California Building Code. These include the use of low-flush toilets and urinals, compliance with statewide efficiency standards for shower heads and faucets, and insulation of pipes to reduce water</p>	<p>No mitigation is required.</p>	<p>Less than Significant Impact</p>

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Impact After Mitigation
	<p>used before hot water reaches equipment or fixtures. The contribution of the proposed project would not be cumulatively considerable.</p> <p>The demands on the OWTP would continue to increase with construction of cumulative projects. The plant currently has the capacity to accommodate up to 31.7 mgd (with 7.7 mgd of available capacity) and treatment plant upgrades that would not generate additional capacity are currently in the planning process. Therefore, the current capacity of the OWTP is sufficient to serve planned and pending development. The City general fund monies and wastewater treatment connection fees provide revenue for the necessary replacement and improvements to the wastewater treatment plant. Therefore, cumulative impacts relating to the local wastewater system are considered less than significant.</p>		

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
%	Percent
AB	Assembly Bill
ACOE	Army Corps of Engineers
ADT	Average Daily Trips
af/yr	acre-feet per year
AHLRA	Aircraft Hazard and Land Use Risk Assessment
ALUC	Airport Land Use Commission
amsl	Above Mean Sea Level
AP	Alquist-Priolo
APAC	Agricultural Policy Advisory Committee
APE	Area of Potential Effect
APWF	Advanced Water Purification Facility
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ASCE	American Society of Civil Engineers
ATC	ATC Group Services
bgs	Below Ground Surface
BMP	Best Management Practice
BP	Before Present
CAAA	Clean Air Act Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CAD	Computer-aided Drafting
Cadna	Computer Aided Noise Abatement
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CALGREEN	California Green Building Code
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
CARB	California Air Resources Board
CBB	City Buffer Boundary
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations

Acronyms/Abbreviations	Definition
Cd	Camarillo Loam
CD	Community Development
CDC	California Department of Conservation
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CDWR	California Department of Water Resources
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CFW	Caldwell Flores Winters, Inc.
CGP	Construction General Permit
CGS	California Geological Survey
CH ₄	Methane
CLUP	Comprehensive Land Use Plan
CMA	Congestion Management Authority
CMP	Congestion Management Program
CMWD	Calleguas Municipal Water District
CNCRC	California Noise Compatibility Regulations and Guidelines
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂	carbon dioxide
COPC	Chemicals of Potential Concern
C-R	Community Reserve
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CURB	City Urban Growth Boundary
CWA	Clean Water Act
dBA	A-weighted Decibels
DDW	Division of Drinking Water
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOT	Department of Transportation
DSA	Division of the State Architect
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources

Acronyms/Abbreviations	Definition
EI	Expansion Index
EIR	Environmental Impact Report
EPA	(United States) Environmental Protection Agency
EPRCRA	Emergency Planning and Community Right-to-Know Act
ESA	Endangered Species Act
ESSC	Earth Systems Southern California, Inc.
EW	East West
FAR	Federal Aviation Regulations
FCGMA	Fox Canyon Groundwater Management Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
ft	Foot or Feet
FTA	Federal Transit Administration
GHG	Green House Gas
GPA	General Plan Amendment
gpcd	gallons per capita per day
gpd	gallons per day
GREAT	Groundwater Resource Encroachment and Treatment
GWP	global warming potential
HA	Hydrologic Area
H ₂ S	hydrogen sulfide
HAZWOPER	Hazardous Waste Operations Emergency Response
Heliplanners	Heliplanners, Inc.
HFC	hydrofluorocarbon
HIA	acute hazard index
HIC	chronic hazard index
HIC8	8-hr chronic hazard index
HSA	Hydrologic Sub-Area
HSWA	Hazardous and Solid Waste Amendments Act
HU	Hydrologic Unit
HVAC	Heating, Ventilation, and Air Conditioning
ICS	Infrastructure and Community Services
ILS	instrument landing system
IS	Initial Study

Acronyms/Abbreviations	Definition
JHE	J House Environmental, Inc.
KA	Kunzman Associates
LADWP	Los Angeles Department of Water and Power
LAFCo	Local Agency Formation Commission
LAS	Lower Aquifer System
lb/day	pounds per day
LCC	Land Capability Classification
LEL	Lower Explosive Limit
Leq	Equivalent Continuous Sound Level
LESA	Land Evaluation and Site Assessment
LID	low impact development
LIM	Land Inventory and Monitoring
Lmax	maximum instantaneous noise level
LOS	Level of Service
LSA	LSA Associates, Inc.
LUC	Land Use Covenant
m ³	cubic meter
MBTA	Migratory Bird Treaty Act
MCE	Maximum Considered Earthquake
µg	microgram
mg	milligram
mgd	million gallons per day
mg/kg	milligrams per kilogram
MICR	maximum individual cancer risk
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRR	mandatory reporting regulation
MSL	Mean Sea Level
MWD	Metropolitan Water District
MWELO	Model Water Efficiency Landscape Ordinance
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality standards
NAHC	Native American Heritage Commission
NE	Northeast

Acronyms/Abbreviations	Definition
NF ₃	nitrogen trifluoride
NHM	Natural History Museum
NO ₂	nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides (nitrogen oxide and nitrogen dioxide)
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NS	North South
NWI	National Wetlands Inventory
O ₃	Ozone
OCP	organochlorine pesticide
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OHP	Office of Historic Preservation
OMC	Oxnard Municipal Code
OPD	Oxnard Police Department
OPR	Office of Planning and Research
OSD	Oxnard School District
OSHA	Occupational Safety and Health Administration
OTM	Oxnard Traffic Model
OWTP	Oxnard Wastewater Treatment Plant
Pb	Lead
PEA	Preliminary Endangerment Assessment
Phoenix	Phoenix Civil Engineering, Inc.
PM	Project Memorandum
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
ppb	Parts Per Billion
ppm	Parts Per Million
ppmv	parts per million by volume
PRC	Public Resources Code
PRIMP	Paleontological Resource Impact Mitigation Program
psig	per square inch gauge
RAC	Risk Assessment Calculator

Acronyms/Abbreviations	Definition
RCRA	Resources Conservation and Recovery Act
RSL	Regional Screening Level
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
RZ	Pre-Zone
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SB18	State Senate Bill 18
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCC	South Central Coast
SCCIC	South Central Coastal Information Center
SCGC	Southern California Gas Company
SCS	Sustainable Community Strategy
SDS	Safety Data Sheet
SDWA	Safe Drinking Water Act
SF ₆	sulfur hexafluoride
SHMA	Seismic Hazard Mapping Act
SHRA	Screening Health Risk Assessment
SIP	State Implementation Plan
SO ₄	Sulfates
SOAR	Save Open Space and Agricultural Resources
SOI	Sphere of Influence
SO _x	sulfur dioxide
sq. ft.	square feet
SWP	State Water Project
SWPCP	Stormwater Pollution Control Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
T-BACT	Best Available Control Technology for Toxics
Tetra Tech	Tetra Tech, Inc.
TGM	Technical Guidance Manual
TIAR	Traffic Impact Analysis Report
TMDL	Total Maximum Daily Load
tpy	tons per year

Acronyms/Abbreviations	Definition
TPZ	Traffic Pattern Zone
UAS	Upper Aquifer System
UBC	Uniform Building Code
URM	Unreinforced Masonry
USDA	U.S. Department of Agriculture
U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
UWCD	United Water Conservation District
UWMP	Urban Water Management Plan
V/C	Volume to Capacity
VCA	Voluntary Cleanup Agreement
VCAPCD	Ventura County Air Pollution Control District
VCTC	Ventura County Transportation Commission
VCWPD	Ventura County Watershed Protection District
VdB	Vibration Velocity Level
VOC	volatile organic compound
ZOI	Zone of Influence

1.0 INTRODUCTION

1.1 EIR TYPE, PURPOSE, AND INTENDED USE

This Final Project Environmental Impact Report (EIR) was prepared by Oxnard School District (OSD or the District) to evaluate potential impacts from all phases of project planning, implementation, and operation for the proposed Doris Avenue and Patterson Road Educational Facilities Project (proposed project). The OSD proposes to construct and operate joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. As lead Agency for the California Environmental Quality Act (CEQA), the District has prepared this Final EIR in compliance with the State CEQA Guidelines and City of Oxnard CEQA Guidelines (Oxnard 2017).

CEQA requires agencies to consider the environmental impacts of a proposed project for which they have discretionary authority before taking action on the project. An EIR is an informational document required to be prepared when a proposed project may have a significant impact on the environment. The information contained in an EIR includes summarized technical data, maps, plot plans, diagrams, and similar relevant information with sufficient detail to permit an assessment of significant environmental impacts by reviewing agencies and members of the public. Per State CEQA Guidelines Section 15002, the basic purposes of CEQA are to:

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways in which environmental damage can be avoided or significantly reduced;
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

This EIR serves as a public disclosure document explaining the effects of the proposed project on the environment, alternatives to the project, and ways to minimize adverse effects and to increase beneficial effects. The EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components.

1.2 SCOPE OF EIR

The content of this EIR was established based on the findings in the Initial Study (IS) and input received from agencies and individuals during the public scoping process. Topics discussed in detail in this EIR include: Aesthetics, Agriculture, Air Quality, Biological Resources, Cultural and Tribal Cultural Resources, Geology and Soils, Green House Gases (GHGs), Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Noise, Population, Public Services, Transportation and Traffic, and Utilities and Service Systems.

Initial Study

The District prepared an IS for all phases of project planning, implementation, and operation of the proposed project that is included as part of Appendix A. The IS helped focus the EIR on the effects determined to be potentially significant, identified effects determined not to be significant, and provided an explanation for determination of impacts found not to be significant. Based on the environmental review contained in the IS, OSD determined that implementation of the proposed project may have a significant effect on the environment and that an EIR is required. Topics identified in the IS as potentially significant and requiring additional environmental review in the EIR include the following:

- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural & Tribal Cultural Resources
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use Planning
- Noise
- Population
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems

Notice of Preparation and Public Scoping Meeting

The District issued a Notice of Preparation (NOP) of an Environmental Impact Report and Notice of Public Scoping Meeting for the Doris Avenue Patterson Road Educational Facilities Project on May 10, 2017. The NOP was filed with the Office of Planning and Research (OPR) and the Ventura County Clerk for public posting. The NOP and IS were also posted on the District's website and available for public review during normal business hours at the District office. The NOP/IS 30-day public review period was from May 10, 2017 to June 9, 2017.

OSD conducted a public scoping meeting for the proposed project on May 22, 2017. The purpose of the scoping meeting was to receive public comment and input regarding the appropriate scope and content of the EIR. A summary of comments received during the public scoping meeting are summarized in Table 1-1.

Table 1-1. Public Scoping Meeting Comments: May 22, 2017

Speaker	Affiliated organization (if applicable)	Comments
Dennis Hardgrave	Owner Representative, Borchard Property	<ul style="list-style-type: none"> • We have an alternative site plan that we will provide and will also be submitting written comments. • In general, we feel our proposed site plan (with different school locations on-site) would be better for neighborhood compatibility and circulation (traffic and walking routes). It would also allow for potential shared use of the playfields with the City. • We would like the trip generation factor for the proposed project when available.
Isidro Figueroa	City of Oxnard	<ul style="list-style-type: none"> • The EIR should include a review of the Airport Comprehensive Land Use Plan. • The City will be submitting written comments.

* Note: Additional written comments were not received during the public scoping period from Dennis Hardgrave/Owner Rep. of Borchard property or from the City of Oxnard.

Comment letters received by OSD from agencies and individuals in response to the NOP are identified in Table 1-2. Appendix A of this EIR includes the NOP, IS, Scoping Meeting Materials, and copies of the comment letters received.

Table 1-2. Comment Letters Received in Response to IS/NOP

Name	Agency (if applicable)
Cy Johnson, Development Programs Administrator	Calleguas Municipal Water District
Scott Morgan, Director, State Clearinghouse	Governor's Office of Planning and Research
Frank Lienert, Associate Governmental Program Analyst	Native American Heritage Commission
Ms. Romero	Individual
Paul Giacobbe	Individual
Kim Hayashi	Individual
Philip Crimmins, Aviation Environmental Specialist	California Department of Transportation Division of Aeronautics
Denice Thomas, Manager Planning Programs Section	Resource Management Agency County of Ventura
Anitha Balan, Engineering Manager II	County of Ventura, Public Works Agency, Transportation Department
Todd McNamee, Director of Airports	County of Ventura Department of Airports
Kimball Loeb, Groundwater Manager	Fox Canyon Groundwater Management Agency
Chares Anthony, Senior Planner	Ventura County Planning Division
Susan Bonucchi, Summerfield Tract Resident	Individual
Sergio Vargas, Deputy Director	Ventura County Watershed Protection District
Alicia Stratton	Ventura County Air Pollution Control District
Alma Quezada, Groundwater Specialist	County of Ventura, Public Works Agency
Steve DeGeorge, Director of Planning	Ventura County Transportation Commission
Andrea Ozdy, Analyst	Ventura Local Agency Formation Commission
Dianna Watson, IGR/CEQA Branch Chief	California Department of Transportation, District & Regional Planning
Carol Dreager	Individual

Known Areas of Controversy

Areas of controversy include known issues or concerns raised by agencies and the public regarding the proposed project. Known issues of concern to OSD are based on preliminary agency consultation, public scoping meeting comments, and comment letters received in response to the NOP (Appendix A). The general key areas of known controversy and the location where the issue is addressed in the EIR are provided in Table 1-3.

Table 1-3. General Areas of Known Controversy

Area of Concern	EIR Section Where Topic is Addressed
Site location near airport	Section 3.8 Hazards and Hazardous Materials
Aircraft hazard	Section 3.8 Hazards and Hazardous Materials
Airport related noise	Section 3.11 Noise
Agricultural conversion and compatibility	Section 3.2 Agriculture
Air quality	Section 3.3 Air Quality
Community character	Section 3.1 Aesthetics
Traffic and traffic safety	Section 3.14 Transportation and Traffic
Water supply and demand	Section 3.9 Hydrology and Water Quality Section 3.15 Utilities and Service Systems

Issues Found Not To Be Significant

Per *State CEQA Guidelines Section 15143*, the EIR shall focus on the significant effects on the environment. Effects dismissed in an IS as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding in the IS.

Table 1-4 identifies the CEQA checklist questions found not to be significant in the IS and identifies checklist questions found not to be significant in the IS but included in the detailed EIR analysis based on new information, including public scoping comments received.

Table 1-4. CEQA Checklist Questions Found Not to be Significant in the IS

Resource Topic	IS Checklist Topic Found Not to be Significant in IS and Discussed Only in Appendix A of this EIR*	IS Checklist Topic Found Not to be Significant in IS but Included in Detailed EIR Discussion Based on New Information
Aesthetics	<ul style="list-style-type: none"> Scenic Vista State Scenic Highways 	
Agriculture & Forest Resources	<ul style="list-style-type: none"> Conflict or cause rezoning of forest or timberland. Loss or conversion of forest land 	
Biological Resources	<ul style="list-style-type: none"> Riparian habitat or other sensitive natural community Local policies or ordinances protecting biological resources Provisions of an adopted habitat conservation plan or natural community conservation 	<ul style="list-style-type: none"> Effect on federally protected waters of the U.S. or protected waters of the state Movement of native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
Cultural Resources		<ul style="list-style-type: none"> Human remains
Geology and Soils	<ul style="list-style-type: none"> Rupture of a known earthquake fault Landslides Geologic unit or soil that is unstable Septic tanks 	

Table 1-4 (Continued). CEQA Checklist Questions Found Not to be Significant in the IS

Resource Topic	IS Checklist Topic Found Not to be Significant in IS and Discussed Only in Appendix A of this EIR*	IS Checklist Topic Found Not to be Significant in IS but Included in Detailed EIR Discussion Based on New Information
Hazards and Hazardous Materials	<ul style="list-style-type: none"> Routine transport, use, or disposal of hazardous materials Safety hazard near private airstrip Implementation of emergency response plan or emergency evacuation plan Wildland fire 	<ul style="list-style-type: none"> Reasonably foreseeable upset and accident conditions
Hydrology and Water Quality	<ul style="list-style-type: none"> Housing within a 100-year flood hazard area Inundation by seiche, tsunami, or mudflow 	
Land Use Planning	<ul style="list-style-type: none"> Physically divide an established community Conflict with habitat conservation plan or natural community conservation plan 	
Mineral Resources	<ul style="list-style-type: none"> Loss of known mineral resource of value to region or state Loss of locally important mineral resource recovery site 	
Noise	<ul style="list-style-type: none"> Excessive noise levels in the vicinity of a private airstrip 	
Population and Housing	<ul style="list-style-type: none"> Displace substantial number of existing housing units Displace substantial number of people requiring replacement housing 	
Public Services	<ul style="list-style-type: none"> Adverse impacts on public school Adverse impacts on public parks Adverse impacts on other public facilities 	
Recreation	<ul style="list-style-type: none"> Increased use of existing parks 	
Traffic/Transportation	<ul style="list-style-type: none"> Change in air traffic patterns 	
Utilities and Service Systems	<ul style="list-style-type: none"> Landfill capacity Statutes and regulations related to solid waste 	

* Refer to the IS (Appendix A of this EIR) for discussion of impact determination.

1.3 EIR ORGANIZATION

This EIR has been prepared in accordance with *California State CEQA Guidelines* and includes the required content as discussed in Article 9, commencing with Section 15120 of these Guidelines. The format of the EIR is organized into sections so the reader can easily locate information about the project and its specific areas.

Executive Summary. This section contains a brief summary of the proposed actions and its consequence in clear and concise language. The summary identifies each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and issues to be resolved including the choice among alternatives and whether or how to mitigate significant effects.

Section 1: Introduction. Describes the EIR type, purpose, and intent. It includes a discussion of the scope of the EIR, organization, and draft public review period.

Section 2: Project Description and Environmental Setting. Describes the project background and objectives; project location and site characteristics; project description; and intended uses of the EIR including, a list of agencies that are expected to use the EIR in their decision making, list of required permits and approval, and list of related environmental review and consultation requirements.

Section 3: Environmental Analysis. Analysis in this Section is discussed by individual resource topics. This section includes a discussion of the physical environmental conditions (baseline conditions) and regulatory settings, methodology, significance thresholds, potential project direct, in-direct, and cumulative impacts, and any mitigation measures needed to reduce project impacts.

Section 4: Other CEQA Considerations. Describes issues required by CEQA that are not included in other sections. This section includes a discussion of significant irreversible environmental change, growth-inducing impacts, and environmental effects which cannot be avoided.

Section 5: Alternatives Analysis. Describes the alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects.

Section 6: References. Includes the sources used to prepare this EIR, including organizations and persons consulted.

Section 7: Report Preparation. Includes the individuals involved in preparing this EIR.

Appendices. Includes supporting data for contents of this EIR.

1.4 PUBLIC REVIEW OF DRAFT EIR

This Draft EIR is available for public review and comment during a 45-day public review period beginning on December 4, 2017 and ending on January 17, 2018 at 5:00 PM. The DEIR is available for public review at:

- OSD District Office at 1051 South A Street, Oxnard, California 93030, during normal business hours.
- OSD's website at: <http://www.oxnardsd.org>
- City of Oxnard Downtown Main Library at 251 South A Street, Oxnard, California 93030

All interested parties are invited to submit written comments on the DEIR; please submit your comments to:

Mr. David Fateh, Director of Facilities
Oxnard School District
1051 South A Street
Oxnard, California 93030
Public Meeting

Comments can also be provided at the public meeting. An agenda item has been added to the regular school board meeting to receive oral comments on the Draft EIR on Wednesday December 6, 2017 at 7:00 PM, at 1051 South A Street, Oxnard, California 93030.

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 MASTER CONSTRUCT AND IMPLEMENTATION PROGRAM

The Oxnard School District has a Master Construct and Implementation Program (“Program”) for school facilities that integrates efforts associated with the implementation of Measure “R” and Measure “D”. Both measures have been integrated to work in tandem by adopting common programmatic goals and facilities specifications, building upon the sources and uses of funds already allocated by the District, and interlacing scheduling, sequencing, and cash flow requirements to leverage proposed improvements (CFW 2017).

All Phase 1 Measure “R” facility improvements are either completed, under construction, or approved by the Division of the State Architect (DSA). Completed efforts include the acquisition of the Seabridge K-5 elementary school site, kindergarten and science lab upgrades to 22 classrooms across eight school sites, and the opening of the new Harrington K-5 campus. Projects under construction include continued reconstruction efforts for the new Lemonwood K-8 and Elm K-5 schools, and the construction of the 6-8 addition to Marshall.

In January 2017, the District launched Measure “D” projects with the planned reconstruction of McKinna and Rose Avenue K-5 elementary schools, the construction of a new Seabridge K-5 school, and the proposed new Doris/Patterson-site for a new K-5 elementary and grade 6-8 middle school (CFW 2017). The District studied a number of potential school sites and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be one that is best available. A copy of the Potential New School Sites Study is provided in Appendix B.

In addition to the proposed project, details of the status of OSD major ongoing facility projects are summarized below:

- The reconstructed Lemonwood K-8 includes a new 2-story classroom building, multipurpose room, administration/library building, and kindergarten building. Construction of these facilities has reached an estimated 66% completion overall, continuing to progress on schedule. The classroom building and multipurpose building are almost complete and planned for an early 2018 occupancy. Construction of the administration/library and kindergarten building are then set to begin with an overall project completion scheduled for early 2019.
- Construction of the Elm K-5 project commenced in February 2017. Utility distribution, foundation work and framing of the walls and roofs for the buildings have been completed. Waterproofing is in place to protect the wood framing from rain during winter months. The project remains on schedule for completion in the second half of the 2018-2019 school year.
- Construction for the new Marshall twelve classroom building began in September 2017 and is underway. The major underground work, including utilities installation is anticipated for December 2017 completion.
- The Harrington Early Childhood Development Center/Kindergarten Annex project provides four preschool classrooms with the flexibility to accommodate transitional kindergarten. Construction began in September 2017, consisting of partial demolition of Building C, followed by the coordination of underground utilities and excavation and foundation pours. Completion of this project will complete all phases of work for the Harrington-site.
- Design plans for the McKinna reconstruction project were submitted to the Division of State Architect (DSA) in October 2017. Design activities for the new Seabridge K-5 school and Rose Avenue reconstruction continue with DSA submittal scheduled for early 2018.
- Design activities for the new kindergarten/flex classroom projects at McAuliffe, Ritcher, Brekke, and Ramona have moved forward including the selection of the design professionals, modular contractor, and lease leaseback firm for the site work. Final siting of the buildings at each campus were completed and

design activities are underway. The projects are planned to be completed in time for occupancy for the 2018-19 school year.

2.2 PROJECT OBJECTIVES

The objectives of the proposed project include the following:

- Accommodate existing and projected future student enrollment within the District
- Provide new facilities that meet the District's educational specifications
- Provide a new K-5 school to accommodate 700 students in permanent classroom facilities
- Provide a new 6-8 school to accommodate 1,200 students in permanent classroom facilities
- Build and maintain school facilities that reflect the wise and efficient use of limited land resources
- Provide new District administrative facilities

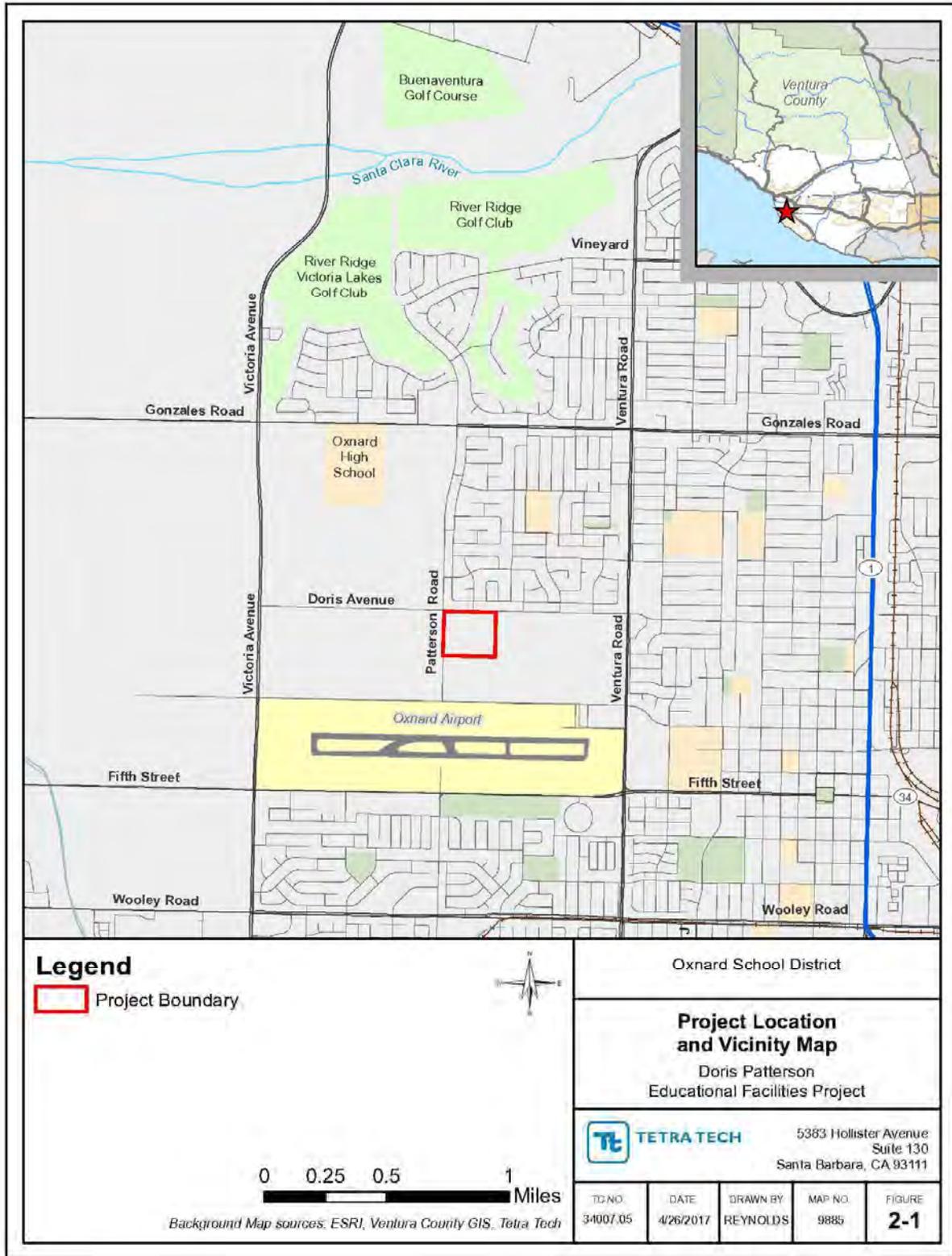
2.3 PROJECT LOCATION

The project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). A Project Location and Vicinity Map is provided as Figure 2-1. The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, State of California as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of 1,088,824.84 square feet (approximately 25 acres).

The project site has a Ventura County General Plan land use designation of agricultural-urban reserve and a zoning designation of agricultural exclusive (AE-40). Since the project site is also within the SOI of the City of Oxnard, the City of Oxnard General Plan identified land use designations for the site. The City of Oxnard General Plan land use designations for the project site include public/semi-public, open space, and park.

The project area is relatively flat and is currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east, and west. The agricultural land to the west is located within the Ventura-Oxnard Greenbelt. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. Oxnard Airport is an active general aviation/small scheduled service airport and the project site is located within Safety Zone 6, identified as the Traffic Pattern Zone (Caltrans 2014).



2.4 PROJECT DESCRIPTION

The OSD proposes to construct and operate a new elementary (K-5), middle school (6-8) and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The project site is located within unincorporated Ventura County and within the City of Oxnard SOI area.

Parcel Boundary

Pursuant to Government Code Section 66428(a)(2), and in compliance with City of Oxnard Municipal Code Section 15-11, under a statutory exemption in the Subdivision Map Act, a tentative map is not required for property transferred to or from a government agency proceeding under Government Code section 66428(a)(2).

Reorganization

The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization. The following LAFCo actions would be necessary components of the reorganization:

- Annexation to the City of Oxnard
- Annexation to the Calleguas Municipal Water District
- Annexation into Metropolitan Water District of Southern California
- Detachment from Oxnard Drainage District 1
- Detachment from the Ventura County Resource Conservation District
- Detachment from the Ventura County Fire Protection District
- Detachment from Ventura County Service Area No. 32
- Detachment from Ventura County Service Area No. 33

As part of the reorganization process, sphere of influence amendments will also be needed. Anticipated amendments include the following:

- Amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services.

School Facilities

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students- on-site. In total, the proposed project would comprise

approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces on-site. In addition, the proposed project includes a variety of playfields and recreational areas to accommodate the recreational needs of the K-8 student's on-site. These facilities include a separate playground for the kindergarten with play structures and open space. There will be lower and upper grade play areas with hard courts for tether ball, basketball and volley ball and motor skill development as well as play structures. Grass fields will be used for kickball, soccer, softball, track and field challenges and general play. The elementary school will have a multi-purpose room for some indoor recreational activities during inclement weather and potential after hours community use. An additional drop-off area for the playfield area is provided along Patterson Road. A conceptual site plan is shown in Figure 2-2.

A two-story 24,868 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. An elementary school drop-off and pick-up area would separate the district office space from the elementary school buildings. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. The elementary school buildings are clustered together to the east of the District office area with primary access provided from Patterson Road. These buildings are anticipated to include:

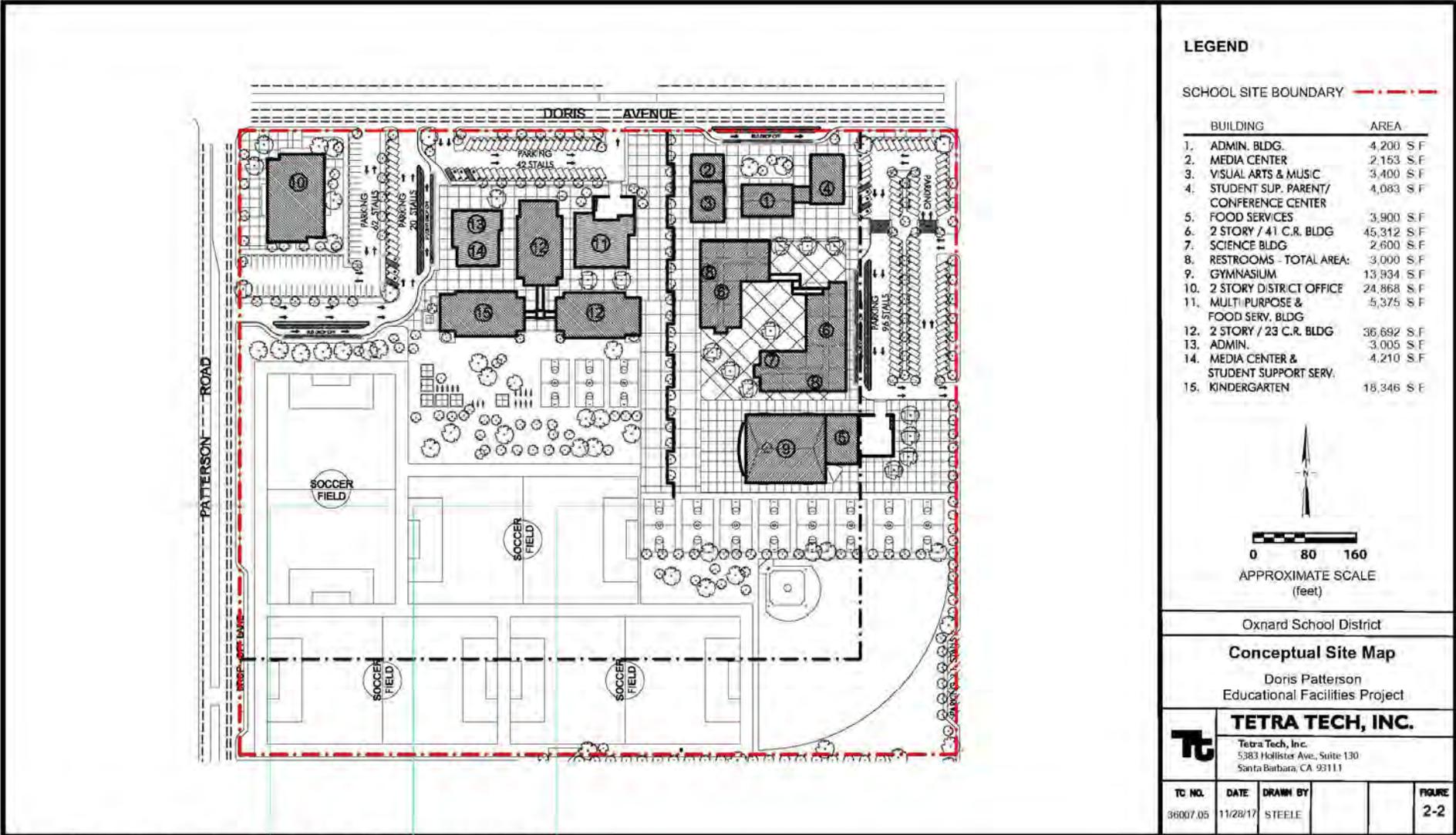
- Multi-Purpose & Food Services (8,975 sq. ft.)
- Two-Story 23 Classroom Building (36,692 sq. ft.)
- Administration Building (3,005 sq. ft.)
- Media Center & Student Support Services (4,210 sq. ft.)
- Kindergarten (18,346 sq. ft.)

A parking lot with 42 spaces is provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces are provided within the drop-off and pick-up area to the west.

The middle school buildings are located near the northeast corner of the site and are anticipated to include:

- Administration Building (4,200 sq. ft.)
- Media Center (2,153 sq. ft.)
- Visual Arts & Music (3,400 sq. ft.)
- Student Support/Conference Center (4,083 sq. ft.)
- Food Services (3,900 sq. ft.)
- Two-Story 41 Classroom Building (45,312 sq. ft.)
- Two-Story Science Building (2,600 sq. ft.)
- Two-Story Restrooms (3,000 sq. ft.)
- Gymnasium (13,934 sq. ft.)

Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pick-up area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed new access road is expected to terminate at the southernmost access to the parking lot for the school.



Map source: Conceptual Doris/Patterson Site Preliminary Study, Job No. 2749 (Flewelling & Moody May 5, 2017)

Project Design Features

Noise

Classrooms would be designed and constructed to have a Community Noise Equivalent Level of 45dB or less. The exterior mechanical equipment is anticipated to be located on roofs in a protected manner such as a parapet.

Landscaping

The project site will have a drought tolerant landscape that meets the 2009 Model Water Efficiency Landscape Ordinance (MWELO) regulations adopted by the Department of Water Resources (DWR).

Lighting

The proposed project will include necessary lighting for adequate nighttime safety and security. Campus lights will be shielded and directed downward to the extent feasible. No lighted playfields are proposed.

There are existing street lights located on the north side of Doris Avenue at the intersections of Patterson Road and at the intersection of Daffodil Way. Those facilities will most likely remain in effect; however, the proposed project would install street lighting on the proposed project frontage and the City may require additional lighting to be installed on Patterson Road and Doris Avenue in the project area. The proposed access road from Doris Avenue to Teal Club Road will also include street lighting.

Stormwater Drainage

The proposed project would install curb and gutter improvements along the north and south sides of the project site. There would be an access road on the east side of the project site and that paved road shall have curb and gutter along the west side. These facilities would route non-project site stormwater around the parcel. The proposed project improvements would include post construction best management practices (BMPs) to manage the storm flows generated by the hardscape portion of the project. The existing agricultural site conditions shall be considered similar to the proposed landscaped areas on the project site plan. Site improvements intended to deal with the proposed project stormwater shall be designed in accordance with the Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, Manual Update 2011. It is intended to utilize BMPs such as a dry extended detention basin (TCM-1) coupled with hydrodynamic separation devices (PT-1) for the parking lot areas. The groundwater is anticipated to be relatively close to the surface so infiltration BMPs such as dry wells may not be preferable (Phoenix 2017).

The southern portion of the project site are soccer fields totaling approximately 6.7 acres of the parcel. As part of this project, those areas would be depressed 8 inches below the surrounding grade (or conversely an 8-inch-tall earthen berm would be constructed along the western, eastern and southern boundaries to collect and detain the storm runoff from the Project. At that depth, this area would collect 195,640 cubic feet (4.5 acre feet) of runoff. This runoff could be detained for up to two days and then the remainder released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Master Plan of Drainage. Preliminary calculations indicate that 5 acre feet of runoff would be generated by a 100 year storm event. The project site could detain that volume with only 0.5 acre feet of runoff (Phoenix 2017).

The parking lot areas would drain to the south field detention areas. The parking lot areas would be filtered to collect the trash, debris and oil/petroleum products out of the runoff prior to discharge onto the field detention areas. The proprietary hydrodynamic filter systems have not been identified at this time, but will be part of the design efforts. Each parking lot will have one device for treating that specific area. Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017).

Transportation/Circulation

A new access road is proposed to the east of the project site as shown on the conceptual site plan (Figure 2-2) The City will dictate the final route for the access road. The sidewalks on the north side of Doris Avenue are a 4-

foot-wide meandering walk. The sidewalks on the south side of the street due to the pedestrian traffic will most likely need to be wider (6- or 8-feet) and will have the width dictated by the City. On Patterson Road, the sidewalk will match Doris Avenue. While the educational facilities would be contained within the 25-acre project site; the City may require the sidewalk be extended to at least the project boundary.

Utility Connections

The project site is currently undeveloped and used for agriculture. Utility connections will need to be extended to the site, including water, sewer, gas, electric, data/telecommunications, and recycled water.

- On the west side of the proposed site (Patterson Road) there are existing 15- and 8-inch diameter wastewater pipelines. Teal Club Road has a 21-inch diameter sewer pipeline that collects flow and transports it to the west where it heads south on Victoria Avenue. There are no wastewater facilities located in Doris Avenue. The City's Master Plan shows that there are no capacity issues in the Teal Club Road trunk sewer pipeline or the pipelines located in Patterson Road. Discussion with the City Public Works Department during design will determine if the 8- or 15-inch diameter pipeline is connected to for serving the project site. The addition of the proposed project is assumed to not cause capacity improvements in the existing collection system (Phoenix 2017). There is an existing 12-inch diameter potable water pipeline that is located on Doris Avenue across the frontage of the proposed site.
- Power facilities are located on Doris Avenue and a portion of Patterson Road as underground facilities. South of the first aerial pole on Patterson Road, the power facilities are aerial.
- Gas facilities are not present on Doris Avenue or Patterson Road according to the record drawings received from the Gas Company.
- Recycled water pipelines are not present in Doris Avenue or Patterson Road; however, the City may require installation of a mainline. The proposed project would be designed with "purple pipe" for recycled water so that the proposed project can connect if recycled water becomes available.
- Telecommunication facilities exist on Patterson Road and in the development to the north (across Doris Avenue).

Project Construction

Construction of the proposed K-5 and 6-8 schools are planned to start in 2019. All project construction activities including those for the Administrative Facilities are anticipated to be completed by the start of the 2021-2022 school year. The Project construction activities are anticipated to occur in phases and include site preparation, grading, building construction, paving, architectural coating, and landscaping.

Anticipated construction equipment includes graders/compactors, backhoes, watering trucks, trucks carrying required fill or spoils would be used for the grading portion of the project(s). During the building construction phases, material delivery trucks, including tractor trailers, would be bringing raw and finished materials and equipment. Paving for parking areas and hardcourts are expected to be asphalt. Concrete for foundations floor slabs and walkways and plazas shall be delivered via concrete mixing vehicles. Back hoes and forklifts and small cranes are also anticipated to move materials around the site or assist in placing in the facilities.

The size of the construction crews for either the elementary or middle school will vary day by day. Typical days have an average of 20 personnel on-site, while peak personal levels may reach over 50 depending on activities and the project schedule. Personnel working on the project site will park on-site. Contractor field personnel for each school or office would typically include a project superintendent, assistant superintendent, and a clerk. A project manager may also be assigned to be on-site for a portion of each work day. One project inspector is expected to be on-site for each facility. Specialty inspectors would be on-site for various activities such as welding or masonry. Periodically architects, engineers, public agency and District staff would be on-site to review progress (typically weekly).

Employees

The District Administrative Facility would have approximately 113 staff (CFW 2015). The approximate number of employees for each school was estimated based on the educational specifications approved by the Board. The K-5 elementary school is anticipated to have approximately 52 employees. This includes 7 administrative staff (including a psychologist and nurse), 30 teachers, 6 aides, 1 library staff, 1 technology teacher, 4 cafeteria workers, 2 janitors, and 1 grounds staff. The 6-8 middle school is anticipated to have approximately 74 employees. This includes 7 administrative staff (this also includes a psychologist and nurse), 50 teachers, 4 aides, 2 library workers, 1 technology teacher, 6 cafeteria workers, 3 janitors, and 1 grounds staff.

2.5 REQUIRED PERMITS AND APPROVALS

This EIR will be used by OSD and responsible and trustee agencies with jurisdiction over portions of the project prior to deciding whether to approve or permit project components. A public agency, other than the lead agency, that has discretionary approval power over a project is known as a “responsible agency” as defined by CEQA Guidelines Section 15381. The City of Oxnard, LAFCo, Ventura County Airport Land Use Commission, Calleguas Municipal Water District, and MWD are responsible agencies. Anticipated discretionary actions for the proposed project are identified in Table 2-1.

Table 2-1. Discretionary Actions

Agency/Organization	Role	Action
Oxnard School District	Lead Agency	<ul style="list-style-type: none"> Approve Project (Educational Specifications, Design/Construction Funding and Associated Contract Approvals)
City of Oxnard	Responsible Agency	<ul style="list-style-type: none"> Initiate Reorganization GPA and Pre-Zone
LAFCo	Responsible Agency	<ul style="list-style-type: none"> Approval of Reorganization
Ventura County Airport Land Use Commission	Responsible Agency	<ul style="list-style-type: none"> Finding of Consistency or Inconsistency with the Airport Comprehensive Land Use Plan
Calleguas Municipal Water District (CMWD) & Municipal Water District	Responsible Agencies	<ul style="list-style-type: none"> MWD Formal Terms CMWD Approval of Annexation (accept MWD Formal Terms and LAFCo Conditions)

In addition to discretionary actions, additional state, regional and/or local government permits may be required to develop the proposed project, whether or not they are explicitly listed in Table 2-2.

Table 2-2. Non-Discretionary Permits/Approvals

Agency	Permit/Approval
City of Oxnard	Local roadway modifications and water connections
California Department of Education	Approval of construction plans and allocation of construction funding
Fox Canyon Groundwater Management Agency	Approval of water allocation transfer
California Department of Fish and Wildlife	Jurisdictional determination; if needed, Streambed Alteration Agreement
California Department of Toxic Substance Control	Approval of Land Use Covenant
Division of the State Architect	Approval of construction plans and grading permit
Federal Aviation Administration	Obstruction evaluation
State Water Resources Control Board	Stormwater Construction General Permit
Los Angeles Regional Water Quality Control Board	If needed, authorization under Clean Water Act Section 401 If needed; Groundwater Discharge Permit
U.S. Army Corps of Engineers	Jurisdictional determination; if needed, authorizations under the Nationwide Permit Program

3.0 ENVIRONMENTAL ANALYSIS

For each impact identified, a statement of the level of significance of the impact is included. These levels of significance are defined as follows.

- No Impact: No adverse changes in the environment would result.
- Less Than Significant Impact: No substantial adverse change in the environment would result.
- Less Than Significant Impact with Mitigation Incorporated: A significant adverse impact or potentially substantial adverse change in the environment that can be reduced to a less than significant level with the incorporation of mitigation measures.
- Significant Impact: A substantial or potentially substantial adverse change in the environment that cannot be mitigated to a level of less than significant.

3.1 AESTHETICS

This section describes the proposed project's potential to affect visual resources (aesthetics) in the project area. The visual resources to be analyzed include both natural and human-made features that make up the physical characteristics of the landscape. In general, natural resources include the landform, water, soil, and vegetation, while human-made features include physical structures, roads, etc. The analysis describes the potential aesthetic impacts of the proposed project on the existing landscape and discusses the compatibility of the proposed project with existing aesthetic setting.

As noted in the Initial Study (Appendix A), impacts associated with scenic vistas or damage to scenic resources along a scenic highway were found to have a less than significant impact and are not discussed within the EIR.

3.1.1 Environmental Setting

3.1.1.1 Existing Conditions

The visual characteristics of the City of Oxnard are made up of several natural and human-made aesthetic resources, including open spaces, beaches and coastline, agricultural areas, and low rise commercial and residential development, as well as tall buildings associated with the City's skyline (City of Oxnard 2006). Visual characteristics in the project area include a combination of rural open areas and agricultural uses, including the Ventura-Oxnard Greenbelt, and residential development. The Greenbelt areas provide an important open space quality to the City of Oxnard's SOI. The City's urban landscape is also considered an important aesthetic resource according to the City of Oxnard General Plan Draft Background Report (City of Oxnard 2006).

The project site is relatively flat and currently used for agriculture, as shown in Figure 3-1, Project Site and Adjacent Area. It is surrounded by adjacent agricultural uses to the south, east, and west. The Ventura-Oxnard Greenbelt is located to the west of the project site across Patterson Road. Located to the north of the project site, along Doris Avenue, is a residential neighborhood with one- and two-story single-family houses (Figure 3-2). A masonry wall and mature trees line Doris Avenue from Patterson Road to Ventura Road. Commercial uses and additional residential neighborhoods are located east of Ventura Road. The Oxnard Airport is located approximately 1,800 feet south of the project site.

The project site is currently used for agriculture and does not have any permanent sources of light. Light and glare sources in the vicinity of the project site include the residential homes to the north, existing street lights located on the north side of Doris Avenue at the intersections of Patterson Road and at the intersection of Daffodil Way, and vehicles traveling on adjacent roadways (Doris Avenue and Patterson Road), and the Oxnard Airport to the south.

As is discussed in the Initial Study (Appendix A), the proposed project is not located adjacent to a designated State scenic highway or eligible State scenic highway, as identified on the California Scenic Highway Mapping System (Caltrans 2017). The City, in conjunction with Ventura County and the City of Port Hueneme has selected routes for the City's Scenic Highway System (City of Oxnard 2006). These routes include:

- Patterson Road between Fifth Street and Hemlock Street and between Vineyard Avenue and Doris Avenue; and
- Doris Avenue between Victoria Avenue and Patterson Road.

The scenic route portion of Patterson Road is located to the immediate north of the project site. The scenic route portion of Doris Avenue is located to the immediate west of the project site. These routes have scenic values because of their views of the Ventura-Oxnard Greenbelt and in the distance the Los Padres National Forest mountain range.



Figure 3-1. View Looking Northeast across Site from Site Western Border



Figure 3-2. View of Adjacent Areas Looking Northeast from Site Northern Border

3.1.1.2 Regulatory Setting

Federal

No federal policies or regulations pertaining to aesthetics are applicable to the proposed project.

State

No federal policies or regulations pertaining to aesthetics are applicable to the proposed project.

Local

City of Oxnard 2030 General Plan Goals and Policies

Chapter 3, Community Development, establishes goals and policies for the distribution and intensity of land use types. The focus of this element is on revitalization of existing neighborhoods and new development within the community, and continued greenbelt and agriculture uses within the City's SOI. Applicable goals and policies specific to aesthetic resources include:

Goal CD-1. A balanced community consisting of residential, commercial, and employment uses consistent with the character, capacity, and vision of the City.

CD-1.6 Public Facilities. Enhance resident quality of life by providing adequate space for schools, libraries, parks and recreation areas, as well as space for the expansion of public facilities to support the community's vision.

CD-1.8 Natural Resource Conservation. Promote a high quality of life within the community, incorporating the retention of natural open space areas, greenbelts, and the provision of adequate recreational facilities.

Goal CD-3. A city of stable, safe, attractive, and revitalized neighborhoods with adequate parks, schools, infrastructure, and community identity and pride.

CD-3.4 Neighborhood Quality of Life Program. Develop an ongoing program to assess parking, lighting, traffic safety, use and quality of alleys, public utilities, public and private lighting, housing quality, aesthetics, and related quality of life topics to identify and prioritize opportunities for neighborhood quality of life enhancement activities and sources of funding.

Goal CD-7. Development of vibrant mixed-use urban villages characterized by a mix of land uses, transit accessibility, pedestrian orientation, and neighborhood identity.

CD-7.12 Urban Village Collocation with Schools. Promote the collocation of parks with school facilities for the purpose of enhancing available open space and recreation.

Goal CD-9. A high quality visual image and perception of the City.

CD-9.1 Neighborhood Identity. Recognize, preserve, and improve the visual identity and character of existing neighborhoods. Infill development shall respect historic structures and be of compatible scale and character with historic areas.

CD-9.4 View Corridor Preservation. Ensure that all public and private investments positively contribute to the overall character of the City by minimizing impacts on important view corridors by creating edge treatments along greenbelt areas and a landscaped buffer corridor of at least 30 feet along designated scenic corridors and other major transportation corridors.

CD-9.5 Unique Character Preservation. Ensure that new public and private investments maintain the unique coastal and agricultural character of the City.

Goal CD-14. Expectations of higher quality design.

CD-14.1 Design Review Process. In the evaluation of development proposals, continue to ensure that public and private development projects comply with City design policies, plans, and guidelines.

Chapter 4, Infrastructure and Community Services, sets goals and policies for traffic and circulation, long-term water supply, parks, public safety, schools, and other public and semi-public facilities and services. Applicable goals and policies specific to aesthetic resources include:

Goal ICS-2. A transportation system that supports existing, approved, and planned land uses throughout the City while maintaining a level of service “C” at designated intersections unless excepted.

ICS-2.11 Scenic Highway Preservation. Preserve and enhance the character of scenic highways, and publicly owned and utility rights-of-way.

Chapter 5, Environmental Resources, addresses the conservation, development, and use of natural resources, and also explores the managed production of resources, significant buildings and historic sites, water resources, biological, and agricultural resources. Applicable goals and policies specific to aesthetic resources include:

Goal ER-6. Protected and enhanced natural setting and scenic resources.

ER-6.1 Incorporate Views in New Development. Preserve important public views and viewsheds by ensuring that the scale, bulk and setback of new development does not significantly impede or disrupt them and ensure that important vistas and view corridors are enhanced. Require development to provide physical breaks to allow views into these vistas and view corridors.

ER-6.2 Protect and Enhance Major Scenic Resources. Protect and enhance the scenic resources of the beaches, Channel Island Harbor, windrows, farmland, the Channel Islands, and surrounding mountains.

ER-6.5 Control of Lighting and Glare. Require that all outdoor light fixtures including street lighting, externally illuminated signs, advertising displays, and billboards use low-energy, shielded light fixtures which direct light downward and, where public safety would not be compromised, encourage the use of low-pressure sodium lighting for all outdoor light fixtures.

Goal ER-9. Enhanced perceived character and quality of the City of Oxnard

ER-9.3 Residential Street Lighting. Provide residential street lighting that is appropriate in appearance, scale, and intensity for residential use.

ER-9.4 Human Scale Development. Ensure that all new development emphasizes a human, pedestrian scale and minimizes its effect on the area’s sensitive visual resources.

Goal ER-10. Enhanced landscape quality with an emphasis on landscape practices, management and plant species that are appropriate to Oxnard and its coastal climate.

ER-10.1 Promote use of Native and Water Wise Plants. Promote the development of a native, drought-tolerant landscape character throughout the City that reinforces a unified and cohesive landscape character and discourage plants that are invasive or problematic in other ways as determined by the City’s landscape architect.

Oxnard Municipal Code

The Oxnard Municipal Code (OMC) contains regulations governing the physical appearance of development within the City.

3.1.2 Impact Analysis

3.1.2.1 Methodology

The visual impact a project may have is qualified through the examinations of the following factors: (1) the type of visual change that will result from the project; (2) the degree to which a project's visual characteristics or elements differ from the same visual elements established in the existing landscape; (3) the project's apparent size relative to other visible landscape features; and (4) the degree to which a project features change or block views of scenic resources. Landscapes with similar characteristics to a proposed project's features indicate a landscape more capable of accepting those project characteristics than a landscape where those elements are absent. This analysis examines the existing visual character of the project site and surrounding area against the proposed project, analyzing the nature of the anticipated change.

3.1.2.2 Significance Thresholds

The thresholds for aesthetic resource impacts used in this analysis are consistent with Appendix G of the CEQA Guidelines.

- *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway, or route identified as scenic by the County of Ventura or City of Oxnard?*
- *Would the project substantially degrade the existing visual character or quality of the site and its surroundings?*
- *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

3.1.2.3 Project Impacts

Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway, or route identified as scenic by the County of Ventura or City of Oxnard?

The scenic route portions of Patterson Road and Doris Avenue are located to the immediate north and west, respectively, of the project site. Views of the Los Padres mountain range from the scenic route portions of Patterson Road and Doris Avenue would remain unobstructed.

Views of the Ventura-Oxnard Greenbelt would primarily be from travelers on local roadways in the vicinity of the project site including Patterson Road and Doris Avenue. These are short duration viewers. Development of the proposed project would occur on the southeast corner of Doris Avenue and Patterson Road. Therefore, travelers' views of the Ventura-Oxnard Greenbelt located to the west would not be impacted on Patterson Road. On Doris Avenue, development of the project may obstruct westbound travelers' views across the site to the Ventura-Oxnard Greenbelt for a short duration in comparison to existing conditions. While this would be a visual change, it would not be a significant impact since the proposed project is located in an area planned for future development in the City of Oxnard General Plan and westbound travelers would be coming from similar developed areas. Eastbound travelers on Doris Avenue would be leaving the Ventura-Oxnard Greenbelt viewing area and traveling toward more developed urban areas in the City of Oxnard. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views of the Ventura-Oxnard Greenbelt along Doris Avenue and Patterson Road are generally obstructed by an existing wall along the perimeter of the development and street trees along the northern side of Doris Avenue as shown in Figure 3-2. In addition, the proposed project will be designed to be consistent with the community character goals and policies of the City of Oxnard General Plan designed to minimize impacts to scenic resources adjacent to scenic routes. Therefore, the proposed project would have a less than significant impact on these scenic routes, and no mitigation measures are required.

Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Within the immediate project vicinity, the area can be characterized by a mix of agricultural and urban residential uses. Further south of the project site, across Teal Club Road is Oxnard Airport. Implementation of the proposed project would change the visual setting of the project site from undeveloped agricultural land to a more developed landscape with new buildings and structures to support an administration building, new K-5 elementary school, and 6-8 middle school. The proposed project also includes recreational facilities including grass playfields.

Visual impacts would result from construction activities, including the presence of equipment, materials, and workers, at the project site, and along Doris Avenue and Patterson Road. These impacts would be considered short-term and temporary. Vehicles such as automobiles, pickup trucks, and dump trucks would be visible. Heavy equipment such as backhoes, graders, and excavators and workers would be visible during site clearing, grading, construction, and site cleanup. Construction equipment and activities would be seen by various viewers in proximity to the project site, including pedestrians and motorists on Doris Avenue and Patterson Road. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views along Doris Avenue and Patterson road are generally obstructed by the existing wall and street trees. Therefore, project visual impacts from construction activities would be less than significant.

Development of the project site would change the visual character of the project site by introducing new buildings and structures to the area in comparison to existing conditions. The educational buildings will be located on the northern half of the project site and would be up to two stories (25 feet) tall, in keeping with the existing characteristics of the adjacent residential neighborhood to the north. Each project element (the elementary school, middle school and District administrative center) will be bordered by landscaping. The incorporation of landscaping would result in these features being the most visible elements along public street frontages. The southern half of the project site will be composed of playfields (soccer, baseball, and hardcourts). The playfields will provide a visual segue way between the developed and agricultural environment while the land located to the south of the project site remains in agricultural production.

The visual characteristics of the proposed project would be consistent with the developed areas immediately to the north and nearby to the east. The project would be consistent with the visual character of future development anticipated under the City of Oxnard General Plan for the project site area. The project would represent the continuation of existing city-wide land use patterns and proposed new development within the northeastern portions of the City of Oxnard SOI on land used for a variety of agricultural and open space uses (City of Oxnard 2011). Therefore, project impacts to visual character and quality would be less than significant and no mitigation measures are required.

Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The proposed project would introduce new lighting to the site from exterior security and street lighting and from interior window spillage. It is anticipated that the school may be used in the evening for periodic school activities. This would result in some increased light and glare from vehicles entering or leaving the site at night.

The proposed project would install street lighting on the project frontage and the City may require additional lighting to be installed on Patterson Road and Doris Avenue within the project area. The proposed project would include exterior lighting around the buildings, walkways and parking areas as needed for adequate safety and security at night. No lighted playfields are proposed. The exterior finish of the proposed buildings would not include any highly reflective surfaces aside from standard glass windows.

The proposed project would be constructed with materials and lighting that will be consistent with the lighting principles contained in the Community Design Element of the City of Oxnard General Plan (Oxnard 2011) and the Oxnard Municipal Code (Oxnard 2017), that require that all outdoor lights be designed, located, and arranged so as to reflect the light away from adjoining properties or streets. Campus lights will be shielded and directed

downward to the extent feasible to minimize glare for pedestrians and drivers and to minimize spillover light. The landscaping buffers surrounding all the parking lots will also minimize and/or block campus lighting and any headlights from vehicles traveling on the project site. While the proposed project would introduce new sources of light and glare; this change would be similar to existing light associated with the adjacent residential neighborhoods and roads. Therefore, the proposed project would not result in a substantial source of light or glare and project impact would be less than significant.

3.1.2.4 Cumulative Impacts

Through the development of the proposed project and other development contemplated for this area in the City of Oxnard General Plan, the visual character of the project area would increasingly change from agricultural to urban. The City of Oxnard 2030 General Plan Program EIR evaluated the potential environmental impacts of buildout of the 2030 General Plan, including the project area. The 2030 General Plan Program EIR found that while this development would have impacts related to scenic routes, visual character, and light and glare, these impacts would be less than significant and would not require mitigation. As the proposed project is similar to the development contemplated for the project site in the City of Oxnard General Plan, the proposed project's incremental contribution to impacts associated with visual quality would be less than significant.

3.1.2.5 Mitigation Measures

No mitigation required.

3.1.2.6 Level of Impact After Mitigation

Project impact is less than significant.

3.2 AGRICULTURE

This section describes the proposed project's potential to: convert Farmland of Statewide Importance, as designated by the California Department of Conservation (CDC), Division of Land Resources Protection, to non-agricultural uses; conflict with existing zoning for agricultural use; and/or individually or cumulatively result in the loss of Farmland to non-agricultural use.

As noted in the Initial Study (Appendix A), the proposed project will not conflict with: a Williamson Act contract, or existing zoning for forest land, timberland, or timberland zoned Timberland Production; nor will it result in loss of forest land or conversion of forest land to non-forest use.

3.2.1 Environmental Setting

3.2.1.1 Existing Conditions

Regional

Within Ventura County, agriculture plays a vital role in the local economy and it consistently ranks among the most profitable in California (Ventura County 2005). The temperate local climate, the availability of water and level topography, and the depth of high quality soils allows for the farming of a wide range of crops. Farms and ranches account for 190,000 acres of land in Ventura County.

Estimated gross values revenue sales of agricultural products in Ventura County increased from approximately \$2.13 billion in 2014 to approximately \$2.19 billion in 2015 (County of Ventura 2016). The largest increases in crop values from 2014 to 2015 were in the fruit and nut crops and vegetable groupings. The largest decreases in crop values from 2014 to 2015 were in the livestock and poultry and field crops groupings. Table 3-1 shows the 2014 and 2015 values of major crop groupings in Ventura County.

Table 3-1. 2015 Crop Grouping Values in Ventura County

Crop Grouping	Year	Value ¹
1. Fruit and Nut Crops	2015	\$1,357,101,000
	2014	\$1,338,004,000
2. Vegetable Crops	2015	\$583,281,000
	2014	\$557,614,000
3. Nursery Stock	2015	\$195,817,000
	2014	\$180,499,000
1. Cut Flowers	2015	\$48,522,000
	2014	\$47,615,000
2. Livestock and Poultry	2015	\$6,878,000
	2014	\$7,887,000
3. Apiary Products	2015	\$2,108,000
	2014	\$554,000
4. Sustainable Agriculture	2015	\$3,838,000
	2014	\$3,443,000
5. Field Crops	2015	\$1,010,000
	2014	\$1,417,000

¹ Figures are rounded off to nearest \$1,000.

² Ventura County has approximately 95,802 acres of irrigated cropland. Total farmed acreage is 293,549 (197,747 is in Rangeland).

Source: County of Ventura, Office of Agricultural Commissioner, Ventura County's 2015 Crop & Livestock Report, December 13, 2016

The conversion of agricultural land to non-agricultural land uses is monitored by the CDC Farmland Mapping and Monitoring Program (FMMP). The conversion of important farmland in Ventura County from 2010 to 2012 is illustrated in Table 3-2.

Table 3-2. Ventura County 2010-2012 Farmland Acreage Changes

Land Use Category	Total Acreage Inventoried		2010-2012 Acreage Changes			
	2010	2012	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed
Prime Farmland	42,422	41,570	1,056	204	1,260	<852>
Farmland of Statewide Importance	33,484	33,337	197	50	247	<147>
Unique Farmland	28,792	28,725	528	461	989	<67>
Farmland of Local Importance	14,989	15,168	795	974	1,769	279
Total	119,687	118,800	2,576	1,689	4,265	<887>

Source: CDC 2015

Local Area

The City of Oxnard's Mediterranean climate, fertile topsoil, adequate water supply, and long harvest season combine to provide favorable agricultural conditions in the surrounding Oxnard plain that is the center of a regional agricultural industry (City of Oxnard 2009). The City of Oxnard contains some of the most fertile land in Ventura County. Important Farmlands account for the majority of farmland (22,960 acres) within the City of Oxnard and its SOI (City of Oxnard 2006).

The project site is under active agricultural use supported with irrigation. The CDC FMMP identifies 25 acres (or 100%) of the project site as Farmland of Statewide Importance (CDC 2017).

According to the U.S. Department of Agriculture (USDA), Soil Conservation Service, Soil Survey of the project site, 100% of the on-site soils consists of Camarillo loam (Cd) (USDA NRCS 2017). Soils are placed in grades according to their suitability for general intensive farming as indicated by their Storie Index ratings. The on-site Cd soils are designated as Grade 2 soils with a Storie Index rating of 80. Soils of Grade 2 soils are good agricultural soils, although they are not as desirable as soils in Grade 1 because of a less permeable subsoil, deep cemented layers (e.g., duripans), a gravelly or moderately fine textured surface layer, moderate or strong slopes, restricted drainage, low available water capacity, lower soil fertility, or a slight or moderate hazard of flooding.

The area immediately surrounding the proposed project site includes a mix of residential and agricultural land uses.

3.2.1.2 Regulatory Setting

Federal

No federal policies or regulations pertaining to agriculture are applicable to the proposed project.

State

Farmland Mapping and Monitoring Program (FMMP)

The goal of the FMMP is to provide consistent, timely, and accurate data to decision makers for use in planning for the present and future of California's agricultural land resources. To meet this goal, FMMP provides maps and statistical data to the public, academia and government agencies to assist them in making informed decisions for

the utilization of California's farmland (CDC 2004). FMMP was established in 1982 in response to a need for assessing of agricultural lands and informing decisions affecting conversion of these lands over time. FMMP regularly reports on the conversion of farmland and grazing lands and provides maps and maintains a database system to record and report changes in the use of agricultural lands throughout California.

Important Farmland mapping efforts were initially begun in 1975 by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), and now continued through the FMMP. The intent was to produce agricultural resource maps based on soil quality and land use across the nation. As part of this nationwide mapping effort, NRCS developed a series of definitions known as the Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production, which included physical and chemical characteristics of soils, as well as specified land use characteristics. Important Farmland Maps are derived from NRCS soil survey maps using LIM criteria (CDC 2004).

Important Farmlands

Important farmland maps are compiled by the FMMP, pursuant to the provisions of Section 65570 of the California Government Code. These maps, utilizing data from the NRCS soil survey and current land use information using eight mapping categories, represent an inventory of agricultural resources within San Bernardino County. The maps depict currently urbanized lands and a qualitative sequence of agricultural designations. Maps and statistics are produced biannually using a process which integrates aerial photo interpretation, field mapping, a computerized mapping system and public review.

Land is classified into one of eight categories (five relating to farming and three associated with nonagricultural purposes) which include: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-Up Land, and Other Land. Prime Farmland is defined as having the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date. Farmland of Statewide Importance, is land similar to prime farmland but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.

Local

County of Ventura Agricultural/Urban Buffer Policy

This Policy's purpose is to ensure that farming can continue even with urban neighbors. The Policy provides guidelines to reduce agricultural/urban interface conflicts and to protect the public health, safety and welfare of the citizens of Ventura County and protect the economic viability and long-term sustainability of the Ventura County agricultural industry. The Policy applies where urban structures or ongoing non-farming activities are permitted adjacent to land 1) in crop or orchard production; or 2) classified by the California Department of Conservation Important Farmland Inventory as Prime, Statewide Importance, Unique or Local Importance farmland. These guidelines apply to projects requiring discretionary approval by the county or a city where the proposed non-farming activity is abutting or on land zoned AE, OS or RA, and the farming activity is located outside a Sphere of Influence, as adopted by the LAFCo. The Agricultural Policy Advisory Committee (APAC) or the Agricultural Commissioner may grant an exemption to these policies on a case-by-case basis, where physical factors prevent or alleviate the need for compliance. Where applicable, urban developments or non-agricultural uses shall be conditioned to provide and maintain a 300-foot setback and reinforced 8-foot chain link fence with top bar on the non-agricultural property between the urban use and the agriculture, or a 150-foot buffer/setback if a vegetative screen as defined in the Policy.

Minimum standards for the vegetative screen (when required) include:

- Two staggered rows of trees and shrubs characterized by evergreen foliage that extends from the base of the plant to the crown;

- Trees and shrubs should be vigorous, drought tolerant and at least 6 feet in height at the time of installation;
- Plants should have 50 percent (%) to 75% porosity (i.e., approximately 50% to 75% of the plant is air space);
- Plant height should vary in order to capture drift within 4 feet of ground applications;
- A mature height of 15 feet or more is required for trees;
- To ensure adequate coverage, 2 staggered rows should be located 5 feet apart and consist of minimum 5-gallon plants at least 6 feet tall planted 10 feet on center;
- Recommended plants include: Toyon (*Heteromeles arbutifolia*), Sugarbush (*Rhus ovata*), Laurel sumac (*Malosma laurina*) and Italian cypress (*Cupressus sempervirens*); and
- A long-term plan shall be in place for maintaining the vegetative shelter belt.

The Policy discourages K-12 school construction within one-quarter mile of agriculture and states that for all K-12 school construction within 300 feet of agriculture:

- A public meeting by APAC is required; and
- The recommendations in *Farming Near Schools, A Community Guide for Protecting Children* (Ag Futures Alliance 2002) shall be followed by both the farmer and the school.

County of Ventura Right-to-Farm Ordinance (Ordinance No. 4151)

This Ordinance is intended to protect the farming community from developments that would inhibit their ability to continue agricultural production. The Ordinance consists of two components, the first of which is found in the enforcement sections of the Coastal and Non-Coastal Zoning Ordinances. These sections of the code protect farmers engaged in agricultural activity from public nuisance claims. The second component requires mandatory disclosure to neighboring property owners of the potential noise, odors, dust, and spraying that may result from farming and details procedures for mediation of disputes that may arise. This section of the “Right to Farm” Ordinance puts a new purchaser of property on notice that existing agricultural operations inherently have noise, odor, and other potentially annoying activities that are associated with accepted agricultural operations

Save Open Space and Agricultural Resources

The City of Oxnard’s Save Open Space and Agricultural Resources (SOAR) initiative was adopted in 1998, establishing the City Urban Growth Boundary (CURB) to direct growth and preserve agricultural resources. The CURB, as originally adopted, defined the urban development boundary for the City of Oxnard until December 31, 2020 at which time the voters could determine whether the program should be extended, modified or expired. The SOAR initiative also established a City Buffer Boundary (CBB), which lies outside of the CURB line and is coterminous with the Oxnard Area of Interest. Generally, any significant change to the CURB line or an agricultural land use designation within the CBB requires approval of Oxnard voters. The exception to this is that the City Council could amend the CURB without seeking voter approval in order to include land for certain exempt uses, including the construction of roads, water facilities, schools, parks and other government facilities, and for development projects that have obtained a vested right as of the effective date of the Ordinance. On November 8, 2016, two SOAR extension measures were approved; Measure K extending the SOAR Ordinance until December 31, 2030 and Measure L extending the SOAR Ordinance until December 31, 2050. The project site is located within the Oxnard CURB line; therefore, voter approval is not required to allow conversion of the site to non-agricultural use.

Greenbelt Agreements

Greenbelt policies have been put into place in order to protect agricultural lands against urban encroachment. The City of Oxnard is a participant in the following two greenbelt agreements, the Oxnard-Camarillo Greenbelt Agreement and the Ventura-Oxnard Greenbelt Agreement (City of Oxnard 2006). Allowable uses within these

greenbelt areas are limited to various agricultural and open space uses and other uses that are consistent with adopted general plans. The proposed project site is located outside of either of these greenbelts but is located immediately adjacent to the east boundary of the Ventura-Oxnard Greenbelt. Road and infrastructure improvements within Greenbelt Agreement areas have historically not been considered “development” nor subjected to Greenbelt Agreement policies. Also, the Greenbelt Agreement expressly allows “land uses that are consistent with the general plan”. The proposed improvements to adjacent roadways such as Patterson Road, Doris Avenue, and/or Teal Club Avenue are all consistent with the City of Oxnard’s adopted general plan and therefore allowed within the Ventura-Oxnard Greenbelt area near the site (Stephens 2017).

City of Oxnard 2030 General Plan Goals and Policies

- Chapter 3, Community Development, establishes goals and policies for the distribution and intensity of land use types. The focus of this element is on revitalization of existing neighborhoods and new development within the community, and continued greenbelt and agriculture uses within the City’s SOI. Applicable goals and policies specific to agricultural resources include:
 - Goal CD-6.1 Agricultural Buffers.** Require that agricultural land uses designated for long-term protection and production be buffered from urban land uses through the use of techniques including, but not limited to, greenbelts, open space setbacks, fencing, berming, and windrows.
 - Goal CD-6.2 Agricultural Preservation.** Preserve agricultural land and uses within the Oxnard Planning Area unless other uses are allowed through a future CURB amendment and/or applicable exemptions.
- Chapter 5, Environmental Resources, addresses the conservation, development, and use of natural resources, and also explores the managed production of resources, significant buildings and historic sites, water resources, biological, and agricultural resources. Applicable goals and policies specific to agricultural resources include:
 - Goal ER-1.** Protection of natural and cultural resources, agriculture, and open spaces is well integrated with the built environment and human activities and achieves a symbiotic, mutually beneficial, sustainable relationship.
 - ER-1.2 Protect Surrounding Agriculture and Open Space.** Protect open space and agricultural uses around Oxnard through continued adherence to the Guidelines for Orderly Development, Ventura County Greenbelt programs, the Save Open-Space and Agricultural Resources Ordinance, and other programs or policies that may subsequently be adopted such as the SB 375 Sustainable Communities Strategy.
 - Goal ER-12.** A viable agricultural industry, maintained and enhanced soil resources, reduced erosion, and improved agricultural productivity.
 - ER-12.11 Urban / Agriculture Buffer Zones.** Ensure adequate buffers between residential and agricultural uses, such as open space, recreational facilities, utility easements, windrows, and parking areas. Adequate fencing should be provided around agricultural areas to prevent vandalism.
 - ER-12.12 Rerouting Roads and Utilities Around Agricultural Areas.** Develop new roads and utilities around prime agricultural areas rather than through them, where feasible.

3.2.2 Impact Analysis

3.2.2.1 Methodology

In determining whether impacts to agricultural resources are significant environmental effects, the lead agency may refer to the California Agricultural Land Evaluation and Site Assessment (LESA) Model (1997) prepared by

the CDC to assess impacts on agriculture and farmland. The LESA system is a point-based model that is generally used for rating the relative value of agricultural land resources. The CDC developed a LESA Model to “provide lead agencies with an optional methodology to ensure that potentially significant effects on the environment of agricultural land conversions are quantitatively and consistently considered in the environmental review process” (Public Resources Code Section 21095).

The California Agricultural LESA Model is composed of six different factors. Two Land Evaluation factors are based upon measures of soil resources quality that are separately rated:

1. The USDA Land Capability Classification (LCC) Rating - The LCC indicates the suitability of soils for most kinds of crops. Groupings are made according to the limitations of the soils when used to grow crops and the risk of damage to soils when they are used in agriculture. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receiving the highest rating (Class I). Specific subclasses are also utilized to further characterize soils. An expanded explanation of the LCC is included in most soil surveys.
2. The Storie Index Rating - The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The rating is based upon soil characteristics only. Four factors that represent the inherent characteristics and qualities of the soil are considered in the index rating. The factors are: profile characteristics, texture of the surface layer, slope, and other factors (e.g., drainage, salinity).

In order to assess the LCC and Storie Index factors, the soils within the project area were identified using a custom Soil Resource Report from the USDA Natural Resources Conservation Service (USDA NRCS 2017).

Four Site Assessment factors provide measures of a given project’s size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. For a given project, each of these factors is separately rated on a 100-point scale. The factors are then weighted relative to one another and combined, resulting in a single numeric score for a given project, with a maximum attainable score of 100 points. It is this project score that becomes the basis for making a determination of a project’s potential significance, based upon a range of established scoring thresholds (CDC 1997). A LESA analysis was prepared for the proposed project.

3.2.2.2 Significance Thresholds

The thresholds for agricultural resources impacts used in this analysis are consistent with Appendix G of the CEQA Guidelines.

- *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- *Would the project conflict with existing zoning for agricultural use?*
- *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

3.2.2.3 Project Impacts

Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The project site is located within the SOI for the City of Oxnard and buildout of the site was accounted for as part of the 2030 General Plan. The City of Oxnard 2030 General Plan EIR found that conversion of important farmland to non-agricultural uses, was a significant and not mitigable impact at the General Plan level. A statement of overriding consideration was adopted with the 2030 General Plan that included the project area. The determination of whether a specific project would have a significant and not mitigable impact relative to the direct

conversion of important farmland requires the consideration of factors unique to the specific project (City of Oxnard 2017).

The CDC FMMP identifies 25 acres or 100% of the project site as Farmland of Statewide Importance (CDC 2017).

A LESA was prepared for the proposed project that considered the six factors of the LESA Model: two Land Evaluation factors comprised of LCC and Storie Index ratings; and four Site Assessment factors comprised of project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. Each of these factors is separately rated on a 100-point scale and the factors are weighted relative to one another and combined to result in a single numeric score for a given project. The maximum attainable score is 100 points.

Soils within the project area were identified using a custom Soil Resource Report (USDA NRCS 2017). The LCC and Storie Index scores generated using the LESA model are provided in Table 3-3: *Land Capability Classification and Storie Index Scores*.

Table 3-3. Land Capability Classification (LCC) and Storie Index Scores

Soil Map Unit	Project Acres	Proportion of Project Acres	LCC Grade	LCC Rating	LCC Score	Storie Index	Storie Index Score
Cd	25	100%	2	80	80	75	75

The Project Size score is based on the amount of acreage of each soil class type. For a project with 20 to 39 acres of Class 2 soils, the score is 50 points. As the proposed project contains 25 acres of Class 2 soils, the project size score is 50.

The Water Resource Availability score is based on the type of irrigation present on the project site and upon the feasibility of irrigation in drought and non-drought years, and whether physical or economic restrictions are likely to exist. As irrigation has been historically conducted throughout most of the project site, the Water Resource Availability score is 100.

The Surrounding Agricultural Land Use score is based on the percentage of land in agricultural use in the project's Zone of Influence (ZOI). The ZOI is the surrounding land within one quarter mile of the project site. Approximately 68.8% of the land in the proposed project's ZOI is in agricultural use. When the percentage within the ZOI is between 65 and 69%, the corresponding Surrounding Agricultural Land score is 60. No lands in the proposed project's ZOI are under a Williamson Act contract, therefore the Protected Resource Lands score is 0.

Using the LESA model, the assessed agricultural value of the project site resulted in a score of 70.25 points (see Table 3-4). As identified in the California LESA Model Scoring Thresholds, scores between 60 to 79 are considered to be significant unless either the Land Evaluation sub-score or the Site Assessment sub-score are less than 20 points. Based on the LESA Score, impacts to agricultural lands from implementation of the proposed project are considered significant.

Table 3-4. Project Land Evaluation and Site Assessment (LESA) Model Score

Factor	Factor Rating (0-100 points)	Factor Weight (Total = 100)	Weighted Factor Rating
<u>Land Evaluation</u>			
Land Capability Classification	80	0.25	20
Storie Index Rating	75	0.25	18.75
<i>Land Evaluation Sub-score</i>			38.75
<u>Site Assessment</u>			
Project Size	50	0.15	7.5
Water Resource Availability	100	0.15	15
Surrounding Agricultural Lands	60	0.15	9
Protected Resource Lands	0	0.05	0
<i>Site Assessment Sub-score</i>			31.5
Final LESA Score			70.25

The permanent conversion of Farmland of Statewide Importance to non-agricultural uses would result in a significant impact. While City policies encourage establishment of a farmland protection program and use of conservation easements and land banking to protect continued agricultural uses throughout the City's SOI, presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009). The City also has policies and programs that support existing agricultural buffers (such as the SOAR Ordinance) in order to reduce or slow further loss of agricultural resources, however, these policies do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce this impact to a less than significant level; therefore, this impact would remain significant and unavoidable (City of Oxnard 2009).

Would the project conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

The project site is currently located within unincorporated Ventura County and is within the Ventura County SOAR boundary. The Ventura County General Plan land use designation for the project site is agricultural-urban reserve and the zoning designation is agricultural exclusive (AE-40). Schools are prohibited within the County's AE-40 zone. However, the proposed project includes annexation into the City of Oxnard thereby the County's land use designations would no longer be applicable to the project site.

The project site is also within the City of Oxnard's SOI with a City of Oxnard General Plan land use designations of public/semi-public, open space and park. The project site is in an area planned for future development in the City of Oxnard 2030 General Plan. The proposed project includes annexation into the City of Oxnard. The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). With the approval of the GPA, Pre-Zone, and Annexation, the proposed project would be consistent with zoning. Impacts would be less than significant and no mitigation is required.

Would the project involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

The project site is located immediately adjacent to agricultural uses to the south, east and west. The Ventura-Oxnard Greenbelt is located to the west of the project site across Patterson Road. Residential uses are located immediately to the north of the project site across Doris Avenue. Direct impacts associated with the loss of agricultural land through a conversion to a non-agricultural use are discussed above.

Indirect impacts could occur with the conversion of the project site from agricultural uses to non-agricultural uses. This type of impact is mainly due to compatibility issues with the adjacent agricultural land still in production (City of Oxnard 2009). Potential compatibility issues may include nuisance effects to a project site from noise, dust, odors, and drift of agricultural chemicals. The adjacent agriculture uses could experience restrictions on the use of agricultural chemicals, complaints regarding noise and dust, and vandalism and pilfering of crops. These conflicts could potentially result in increased costs to the agricultural operation, and encouraged conversion of additional agricultural lands (including Important Farmlands) to urban uses. The City of Oxnard 2030 General Plan contains policies intended to reduce this type of land use incompatibility including policies CD-6.1 and ER-12.11 (providing adequate agricultural buffer areas) and policy ER-12.2 (supporting right-to-farm policies).

The County of Ventura Agriculture/Urban Buffer Policy also provides guidelines to prevent and/or mitigate agricultural/urban interface compatibility issues. Per the County of Ventura Agriculture/Urban Buffer Policy, a 300-foot setback from adjacent agricultural uses to new structures and sensitive uses is required on the non-agricultural property unless a vegetative screen is installed. With a vegetative screen, the buffer/setback is a minimum of 150 feet. These guidelines apply to projects requiring discretionary approval by the county or a city where the proposed non-farming activity is abutting or on land zoned AE, OS or RA, and the farming activity is located outside a Sphere of Influence, as adopted by LAFCo. However, the project site is located within the SOI for the City of Oxnard and buildout of the site was accounted for as part of the 2030 General Plan. In addition, the proposed project includes annexation into the City of Oxnard with a proposed C-R zone, thereby the County's land use designations would no longer be applicable to the project site. As such these guidelines would not apply to the proposed project.

While the County of Ventura Agriculture/Urban Buffer Policy would not apply to project, the District has designed the lay-out of the project in order to minimize compatibility issues with adjacent agricultural uses. Based on input from the Ventura County Agricultural Commissioner, the proposed project was designed to cluster the school facilities within the middle of the northern portion of the site closer to the existing residential neighborhood to the north. The orientation and location of the drop off areas, bus turnouts, and playfields in the proposed site plan were also designed as a result of consultation with the County of Ventura's Agricultural Commissioner. The southern half of the project site will be composed of playfields (soccer, baseball, and hardcourts) and bordered by a vegetative screen, providing a buffer of over 400 feet or greater between the elementary and middle school buildings and the agricultural uses to the south.

The western side of the project site will be composed of the administrative building, a parking lot, playfields (soccer, baseball, and hardcourts) and bordered by a vegetative screen. The administration building would be set back approximately 43 feet from Patterson Road and approximately 150 feet from the Ventura-Oxnard Greenbelt across Patterson Road to the west. There would be a buffer of over 400 feet or greater between the elementary and middle school buildings and the Ventura-Oxnard Greenbelt across Patterson Road to the west.

The eastern side of the project site will be composed of a parking lot, playfields (soccer, baseball, and hardcourts) and bordered by a vegetative screen, providing a buffer of over 172 feet or greater between the administrative building, elementary school, and middle school buildings and agricultural uses to the east.

In addition, as appropriate and applicable, the District will follow recommendations in *Farming Near Schools, A Community Guide for Protecting Children* (Ag Futures Alliance 2002).

With the implementation of these policies, as appropriate, to compatibility issues impacts associated with compatibility issues conversion of the project site from agricultural uses to non-agricultural uses would be less than significant.

3.2.2.4 Cumulative Impacts

Buildout of the City would result in the conversion of up to 2,000 acres of important farmland including 1,230 acres of Farmland of Statewide Importance (City of Oxnard 2009). The cumulative loss of 4,335 acres of important farmland is expected due to development in the County of Ventura (County of Ventura 2005). The proposed project would contribute to the cumulative loss of agricultural lands within the region, specifically acres of Farmland of Statewide Importance. As discussed above, presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009) and City policies and programs to reduce or slow further loss of agricultural resources do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce the project's contribution to this significant cumulative impact to a less than significant level, therefore this cumulative impact would remain significant and unavoidable.

3.2.2.5 Mitigation Measures

No mitigation available to reduce or replace this agricultural land within the City.

3.2.2.6 Level of Impact After Mitigation

Project impacts related to the loss of Farmland of Statewide Importance will remain significant and unavoidable.

3.3 AIR QUALITY

Air quality is defined by the concentration of various pollutants in the atmosphere. By comparing a pollutant concentration in the atmosphere to federal and/or state ambient air quality standards, the impact of its presence can be determined. This section evaluates the potential air quality impacts from construction and operation of the proposed project.

3.3.1 Environmental Setting

All of California is divided into air basins, which are served by either county air pollution control districts or multi-county air quality management districts. Air basins are delineated based on their potential for trapping air pollutants due to natural barriers such as mountains. Pollutants tend to stagnate unless dispersed into other areas by strong enough prevailing winds.

The proposed project is located within Ventura County in the South Central Coast Air Basin (SCC), which consists of Ventura County, Santa Barbara County, and San Luis Obispo County. The Ventura County Air Pollution Control District (VCAPCD) is the agency responsible for attaining federal and state clean air standards within Ventura County. The proposed project is, therefore, within the jurisdiction of the VCAPCD, which oversees the welfare of air quality of Ventura County and promotes its improvement through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and support and implementation of measures to reduce emissions from motor vehicles.

Pollutant concentrations within Ventura County are assessed relative to both National Ambient Air Quality standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

To determine attainment of the NAAQS and CAAQS, VCAPCD monitors air quality through a network of air monitoring stations within its boundaries. Data collected at the monitoring stations is compiled and assessed in an effort to track air quality conditions and support attainment efforts.

3.3.1.1 Existing Conditions

As of September 30, 2017, the United States Environmental Protection Agency (U.S. EPA) listed Ventura County as in attainment for all standards except the federal 8-Hour O₃ (U.S. EPA 2017). Similarly, as of June 2017, CARB lists Ventura County as in attainment for all pollutants except the 8-Hour O₃ and PM₁₀ standards (CARB 2017). A summary of attainment for Ventura County is outlined in Table 3-5.

Table 3-5. Attainment Status of Ventura County

Pollutant	¹ National Attainment Status	² State Attainment Status
1-Hour Ozone	Not applicable	Nonattainment
8-Hour Ozone	Nonattainment – Serious	Nonattainment
PM _{2.5}	Unclassified/Attainment	Attainment
PM ₁₀	Unclassified	Nonattainment
Carbon Monoxide	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Unclassified/Attainment	Attainment
Sulfates	No standard	Attainment
Hydrogen Sulfide	No standard	Unclassified
Visibility Reducing Particles	No standard	Unclassified

Source: 1 U.S. Environmental Protection Agency 2017b.
2 California Air Resources Board 2017a.

3.3.1.2 Regulatory Setting

Federal

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), the U.S. EPA has established the NAAQS for pollutants considered harmful to public health and the environment. The NAAQS are classified as primary and secondary standards. Primary standards prescribe the maximum permissible concentration in the ambient air and are required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects (U.S. EPA 2017a). NAAQS are established for six pollutants (known as criteria pollutants): ozone (O₃), particle pollution (i.e., respirable particulate matter equal to and less than 10 microns in diameter [PM₁₀] and respirable particulate matter equal to and less than 2.5 microns in diameter [PM_{2.5}]), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). A summary of NAAQS is provided in Table 3-6. Under the CAAA directive, attainment and maintenance of NAAQS is required.

Criteria Air Pollutants

The following narratives provide a brief description of effects of criteria air pollutants.

Ozone at the ground level is not emitted directly into the air. Instead, it is formed from a reaction between oxides of nitrogen (NO_x) and volatile organic compounds in the presence of sunlight. NO_x is produced from the combustion of fossil fuels (e.g., diesel, gasoline, and natural gas) through various processes, including vehicles, furnaces, and boilers. VOCs are emitted from solvent and/or solvent-based products such as architectural coatings and degreasers. Ozone is harmful to health, particularly in young children, the elderly, and to populations with respiratory conditions, such as asthma.

Particulate matter is a mixture of solid particles and liquid droplets found in the air. Depending on their size, PM are classified as PM_{2.5} and PM₁₀. Sources of PM include construction-sites, combustion gases, smoke, and soot. PM_{2.5} is primarily responsible visibility reduction in the air. PM_{2.5} relevant health effects include exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease, decline in pulmonary function or growth in children, and increased risk of premature death. PM₁₀ can enter the lungs and bloodstream, causing adverse health effects.

Carbon monoxide is a colorless, odorless gas that results from combustion sources. If inhaled in large amounts, it can cause serious health problems, including dizziness, confusion, unconsciousness, and death.

Nitrogen dioxide is the primary member and used as the indicator for of the family of NO_x. NO₂ results from the burning of fuel in a variety of sources including cars, trucks and buses, power plants, and off-road equipment. NO₂ can react with other pollutants to form O₃ and PM. NO₂ can primarily affect the respiratory system in humans. Short-term exposure to high concentrations of NO₂ can aggravate existing respiratory conditions, such as asthma. Long-term exposure to NO₂ can result in the development of respiratory diseases such as asthma.

Sulfur dioxide is the primary member and used as the indicator for the family oxides of sulfur (SO_x). SO₂ results from combustion of fuels primary at power plants and other industrial facilities. SO₂ reacts with other pollutants to form fine PM. SO₂ affects the respiratory system in humans, and at high concentrations, it can damage trees and crops.

Major sources of lead in the air include ore and metals processing and piston-engine aircraft operating on leaded aviation fuel. Other sources are waste incinerators, utilities, and lead-acid battery manufacturers. Areas in the vicinity of lead smelters have the highest air concentrations of lead. Lead health effects include learning disabilities, impairment of blood formation, and nerve conduction.

The U.S. EPA classifies the air quality within an area with regard to its attainment of federal primary and secondary NAAQS. Pursuant to U.S. EPA guidelines, an area with air quality better than the NAAQS for a specific pollutant is designated as being in attainment for that pollutant. Any area not meeting the NAAQS for a specific pollutant is classified as nonattainment for that particular pollutant. Where there is a lack of data for the U.S. EPA

to make a determination regarding attainment or nonattainment, the area is designated as unclassified and is treated as an attainment area until proven otherwise. Areas that were once designated as nonattainment but are currently meeting and maintaining the NAAQS are designated as maintenance areas. States with nonattainment or maintenance areas are required to prepare plans, known as State Implementation Plans (SIPs), stating how they will attain or maintain NAAQS. SIPs are a compilation of new and previously approved plans, programs, district rules, state regulations and federal controls. States and local air quality management agencies prepare SIPs for approval by the U.S. EPA.

State

At the state level, the California Air Resource Board (CARB) has also adopted air quality standards for California, known as the California Ambient Air Quality Standards (CAAQS) pursuant to the California Clean Air Act (CCAA). The CAAQS are generally more stringent than the NAAQS and include air quality standards for all criteria pollutants listed under NAAQS, plus sulfates (SO₄), hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particulate matter. The CCAA established California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress aimed at meeting and/or exceeding CCAA requirements for air quality. The CCAA requires attainment of CAAQS for criteria pollutants by the earliest practicable date. A summary of CAAQS is presented in Table 3-6.

Table 3-6. National and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹	National Standards ²	
		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
Ozone (O ₃) ⁶	1 Hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
Particulate Matter (PM ₁₀) ⁷	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	
Fine Particulate Matter (PM _{2.5}) ⁷	24 Hour	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	12.0 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
Nitrogen Dioxide (NO ₂) ⁸	1 Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standard
Sulfur Dioxide (SO ₂) ⁹	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
	3 Hour	—	—	0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ⁸	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas) ⁸	—
Lead ^{10,11}	30-Day Average	1.5 µg/m ³	—	—
	Calendar Quarter	—	1.5 µg/m ³ (for certain areas) ¹⁰	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m ³	

Table 3-6 (Continued). National and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹	National Standards ²	
		Concentration ³	Primary ^{3,4}	Secondary ^{3,5}
Visibility Reducing Particles ¹²	8 Hour	See footnote 11	No National Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride ¹⁰	24 Hour	0.01 ppm (26 µg/m ³)		

Sources:

1. Table extracted from <http://www.arb.ca.gov/research/aaqs/aags2.pdf> on February 2017 with information dated May 4, 2016 (California Air Resource Board 2016).

Notes:

1. California standards for ozone, carbon monoxide, sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (µg/m³) is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 Torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 Torr; ppm in this table refers to parts per million (ppm) by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
7. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg /m³ to 12.0 µg /m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg /m³, as was the annual secondary standard of 15 µg /m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg /m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
8. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
9. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of ppm. To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
10. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on 15 October 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg /m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

m³ cubic meter
 µg microgram
 mg milligrams
 ppb parts per billion
 ppm parts per million

Local

Operations within the City of Oxnard are subject to various rules and regulations of the VCAPCD. Table 3-7 lists some of the Rules that are applicable to the proposed project.

Table 3-7. Applicable VCAPCD Rules

Rule	Title
50	Opacity
51	Nuisance
55	Fugitive Dust
74.2	Architectural Coatings

Rule 50 regulates visible emissions from each single source using the Ringelmann Chart as a point of reference and in accordance with EPA Method 9.

Rule 51 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Rule 55 requires control measures for fugitive dust from active operations, open storage piles, or disturbed surface areas and prohibits activities that would cause visible dust emissions of 20%. The rule also includes provision for mitigating fugitive dust emissions (e.g., watering the site during grading, properly covering truck beds when hauling soil or other material, installing dust control measures at each vehicle egress from the site to public paved roads).

Rule 74.2 regulates the VOC content in architectural coating manufactured, distributed and used within the County of Ventura.

Additionally, City of Oxnard General Plan air quality goals and policies relevant to the proposed are provided in Table 3-8.

Table 3-8. Applicable City of Oxnard

SC-3.9	Promote Voluntary Incentive Programs	Promote voluntary participation in incentive programs to increase the use of solar photovoltaic systems in new and existing residential, commercial, institutional and public buildings, including continued participation in the Ventura County Regional Energy Alliance (VCREA).
SC-3.12	Encourage Natural Ventilation	Review and revise applicable planning and building policies and regulations to promote use of natural ventilation in new construction and major additions or remodeling consistent with Oxnard's temperate climate.
SC-4.1	Green Building Code Implementation	Implement the 2010 California Green Building Code as may be amended (CALGREEN) and consider recommending and/or requiring certain developments to incorporate Tier I and Tier II voluntary standards under certain conditions to be developed by the Development Services Director.

Table 3-8 (Continued). Applicable City of Oxnard

CD-8.5	Impact Mitigation	Ensure that new development avoids or mitigates impacts on air quality, traffic congestion, noise, and environmental resources to the maximum extent feasible.
ER-14.4	Emission Control Devices	Require all construction equipment to be maintained and tuned to meet appropriate EPA, CARB, and VCAPCD emissions requirements and when new emission control devices or operational modifications are found to be effective, such devices or operational modifications are required on construction equipment.
ER-14.5	Reducing Construction Impacts During Smog Season	Require that the construction period be lengthened to minimize the number of vehicles and equipment operating at the same time during smog season (May through October).
ER-14.6	Minimizing Dust and Air Emissions through Permitting Requirements	Continue to require mitigation measures as a condition of obtaining building or use permits to minimize dust and air emissions impacts from construction.
ER-14.7	Mitigation Monitoring	Ensure that projects with identified air quality impacts in their respective EIRs are subject to effective mitigation monitoring as required by AB 3180.
ER-14.10	Consultation with Ventura County Air Pollution Control District	Consult with the Ventura County Air Pollution Control District (VCAPCD) during CEQA review for projects that require air quality impact analysis and ensure that the VCAPCD is on the distribution list for all CEQA documents.
ER-14.12	Use VCAPCD Air Quality Assessment Guidelines	Use the VCAPCD Air Quality Assessment Guidelines and recommended analytical tools for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents. The City shall continue to cooperate with the VCAPCD in the review of development proposals.

3.3.2 Impact Analysis

3.3.2.1 Methodology

Guidance found within the Ventura County Air Quality Assessment Guidelines, the City of Oxnard CEQA Guidelines and various sources referenced throughout this air quality analysis were used in the preparation of this document. A summary of the methodology used for emissions calculations is provided below.

Construction and Operational Emissions

Emissions from construction and operation activities were calculated using California Emissions Estimator Model (CalEEMod). CalEEMod is widely accepted to provide a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects. The model takes user entered data to calculate emissions using preprogramed algorithms. The algorithms are designed to take information such as project size and length; vehicle types, operating hours, and trip lengths; and emissions mitigation criteria to calculate emissions of criteria pollutants and greenhouse gases. Detailed CalEEMod input values and calculated air emission results for the proposed project are included in Appendix C. A summary of the activities from which the CalEEMod report was generated is also provided in Appendix C. Air emissions were compared to significance thresholds established by the VCAPCD to determine project impacts on air quality.

Screening Health Risk Assessment. To determine whether construction emissions would pose a risk to the nearby residents, a screening health risk assessment (SHRA) was conducted based on South Coast Air Quality Management District (SCAQMD) Risk Assessment Calculator (RAC), which is designed to be consistent with the Office of Environmental Health Hazard Assessment (OEHHA) 2015 Health Risk Assessment Guidance. Since the RAC is designed to assess health risks from stationary sources, construction emissions were modeled as a single source fixed at a stationary location within the project site. During the construction of the proposed project, construction equipment is expected to move around within the project site. The shortest and longest distances between the equipment and nearby residences are approximately 40 meters and 300 meters, respectively. Thus, an average distance of 170 meters was used as the distance between the modeled source and the residents. During the construction of the proposed project, various equipment units will be running (e.g., backhoes, excavators, and graders), with engines ranging between 36 to 361 horsepower. However, not all units will run at the same time or for the entire duration of the project construction phase (i.e., approximately one year and six months), but will be used as needed during the construction process. Thus, the unit with the largest engine (i.e., the engine the 361 horsepower) was used as the modeled source with modeled running time of eight hours per day running continuously for a period of two years. The selection for this engine represents the worst-case scenario. To determine risk impact to local residents, RAC calculated risks (Appendix C) were compared against the following thresholds:

- The maximum individual cancer risk (MICR) should not exceed one in a million (1×10^{-6}) if Best Available Control Technology for Toxics (T-BACT) is not used; or ten in one million (10×10^{-6}) if T-BACT is used. For this calculation, it was assumed that T-BACT is used since equipment with Tier 2 engines (i.e., clean engines) would be used.
- The cumulative cancer burden from all TACs emitted should not exceed 0.5.
- Neither the chronic hazard index (HIC), nor the 8-hr chronic hazard index (HIC8), nor the total acute hazard index (HIA) from all toxic air contaminants emitted should exceed 1.0 for any target organ system or an alternate hazard index level deemed to be safe.

CO Analysis

The 2003 Ventura County prescribes a carbon monoxide screening analysis for intersections that are expected to operate at level of service (LOS) E or F. The City of Oxnard General Plan prescribes a minimum acceptable LOS of C for intersections (City of Oxnard 2011). The traffic study completed for the proposed project indicates that six intersections near the proposed project would have an unacceptable LOS without mitigation measures. The Traffic Analysis also provides mitigation measures that would cause these intersections to operate at acceptable levels (Kunzman Associates, Inc. 2017). To determine the impacts that would occur as a result of congestion at the six intersections without mitigation a CO analysis was conducted using CALINE4. The CO analysis was conducted for operation of the intersections during the Interim Year (2021) Level of Service, time during which the intersections were identified to have potential unacceptable LOS. The models used to estimate emissions rates and dispersion are EMFAC and CALINE4, respectively. EMFAC is used to determine emission rates for criteria pollutants. Emissions rates of CO were, in turn, used in CALINE4 to calculate CO concentrations reaching nearby establishments and sensitive receptors. EMFAC and CALINE4 input values and results are provided in Appendix C. Concentrations of CO calculated with EMFAC are in addition to background concentrations. For Ventura County background concentration have not been measured for some time. Therefore, the background concentration of 2.3 parts per million as documented in the Ventura County Air Quality Assessment Guidelines (Ventura County 2003) were added to the CO concentrations calculated using CALINE4. CO concentrations were compared against the one-hour California standard for CO.

3.3.2.2 Significance Thresholds

3.3.2.3 Project Impacts

The following criteria for air quality are consistent with Appendix G of the CEQA Guidelines. The proposed project would result in a significant impact if it were to:

- *Conflict with or obstruct implementation of the applicable air quality plan?*
- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?*
- *Expose sensitive receptors to substantial pollutant concentrations?*
- *Create objectionable odors affecting a substantial number of people?*

Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project site is located within Ventura County and within the sphere of influence of the City of Oxnard. To pursue SIP requirements and improvement of air quality in Ventura County, the VCAPCD has prepared the 2016 Air Quality Management Plan (AQMP). The AQMP presents a comprehensive list of pollution control strategies aimed at attaining Ventura County's federal 8-hour ozone standard (for which Ventura County is in nonattainment) as required by the CAAA and the VCAPCD's Triennial Assessment and Plan Update required by the California Clean Air Act of 1988. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG) and reflected in local general plans. Thus, a proposed project that is inconsistent with a local general plan is also inconsistent with the AQMP. A proposed project would be inconsistent with a general plan if it resulted in a land use re-designation, causing a general plan amendment and an increase in population beyond what is budgeted.

The project site is within the City of Oxnard SOI and is adjacent to a fully developed residential development to the north. Buildout of this SOI was accounted for in the City's 2030 General Plan. The General Plan land use designations for the project site include public/semi-public, open space and park. A description of the land uses designations is provided in the General Plan as follows:

- **Public/Semi-Public.** Private, quasi-public, and public buildings and facilities owned by the City, County, State, Federal agencies, or other organizations that serve the general public such as a civic center, flood control channels, rail lines, community college, museum, performing arts center, community center, city yard, library, fire station, public school and /or district support facility, private and parochial school, cemetery, or hospital.
- **Open Space.** Lands in passive and active recreation uses, resource management, flood control management, wetlands, intended for wetlands restoration, and stormwater management facilities and buffer zones separating urban development and other sensitive resources.
- **Park.** Parks, beaches, regional, parks, community parks, neighborhood parks, special purpose facilities, golf courses, athletic fields, and open space areas.

The proposed project includes annexation into the City of Oxnard. The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257).

The proposed project is currently at least partially consistent with the existing General Plan land use designation Public/Semi-Public and would be consistent with the proposed School land designation if approved. The area designated as Public/Semi Public in the City of Oxnard General Plan is similar to the area that would be occupied by the proposed project structures (e.g., classrooms and offices). The only difference is that the proposed project

would be located only about 40% on the area designated Public/Semi-Public. The other approximately 60% would be located on the areas designated as Open Space and Park. The recreational facilities of the proposed project are consistent with the Open Space and Park land uses. As noted in Section 3.12 Population of this EIR, the proposed project would not induce substantial population growth into the area either directly or indirectly. The student population would be part of the existing and projected growth for the city. In general, K-12 schools accommodate growth as a result of other land use decisions in the City such as the construction of new homes. As these educational facilities would accommodate existing and projected growth and the requirement for local schools, an indirect impact related to growth inducement would not occur. The proposed project would not result in population growth above what is forecasted in the 2030 General Plan and in turn the 2016 AQMP. Therefore, the proposed project would not conflict or obstruct implementation of the applicable 2016 AQMP and project impact would be less than significant.

Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The proposed project is located within Ventura County, which is subject to the VCAPCD regulations. Pollutant concentrations within the Ventura County are assessed relative to both the federal and state ambient air quality standards. Ventura County is in attainment for all federal standards except the 8-hour O₃ standard (U.S. EPA 2017b) and all state standards except O₃ and PM₁₀ standards (CARB 2017). The release of various criteria pollutants from both short-term construction and long-term operation related activities for the proposed Project are expected. The following sections provide a summary of the emissions analysis conducted for the proposed project.

Short-term Emissions. Short-term or construction emissions are typically generated by on-road (e.g., employee vehicles and vendor/delivery and water trucks) and off-road vehicles or equipment (e.g., backhoes, dozers, portable generators, and cranes). Short-term emissions end once the construction phase is complete. The proposed project's construction phase consists of site preparation; grading; construction of classrooms, physical activities structures (e.g., soccer fields), and administrative offices; paving; and application of architectural coatings to classrooms and offices. Emissions from the construction phase result primarily from mobile on-road (e.g., workers vehicles, material and equipment delivery trucks, soil haul trucks) and off-road sources (i.e., construction equipment). The construction equipment used for the proposed project would include air compressors, scrapers, cranes, forklift, excavators, pavers, rollers, rubber tired dozers, generator sets, backhoes, graders, paving equipment and welders. A summary of construction emissions is presented in Table 3-9.

Table 3-9. Project Construction Emissions of Criteria Pollutants (lb/day)

Project Phase	CO	VOCs	NO _x	SO _x	PM ₁₀	PM _{2.5}
Construction Emissions	40.19	104.19	51.01	0.06	9.24	5.47
Threshold Significance	None	None	None	None	None	None
Significant?	No	No	No	No	No	No

Notes: CO carbon monoxide
 NO_x nitrogen oxides (nitrogen oxide and nitrogen dioxide)
 PM_{2.5} particulate matter less than 2.5 microns in diameter
 PM₁₀ particulate matter less than 10 microns in diameter
 SO_x sulfur dioxide
 tpy tons per year
 VOC volatile organic compound

Ventura County does not have significance thresholds for construction emissions due to the fact that construction emissions occur only on a temporary basis and do not contribute to long-term air quality impacts. Thus, emissions resulting from proposed project would not be expected to have a significant impact on the environment

and no mitigation measures would be required. However, the following Mitigation Measure AQ-1 is provided to minimize fugitive dust emissions and to ensure compliance with CARB off-road regulations in accordance with Ventura County recommendations for construction emissions exceeding the county's thresholds of significance of 25 pounds per day for NO_x and SO_x. With compliance with Mitigation Measure AQ-1, project impact would be less than significant.

Long-term Emissions. Long-term or operational emissions are emissions that result from activities conducted during the operation of a project (e.g., heating, employee commute, student drop-off and pickup, and facility upkeep). Long-term impacts to air quality would be associated with emissions from equipment used during operation of the proposed project (e.g., commercial water heaters, space heaters, and lawn mowers) and from motor vehicles associated with school employees, student drop-off and pick-up, and vendors. Other activities that would contribute emissions during the operation of the proposed project include upkeep of structures (e.g., reapplication of architectural coatings and patching of paved surfaces). Detail input parameters and emissions results are provided in Appendix C. Emissions resulting from operation of the proposed project are summarized in Table 3-10. Emissions resulting from the operation of the proposed project are below the thresholds of significance established by Ventura County to support attainment of federal standards. Therefore, the proposed project would not be expected to violate any air quality standard or contribute substantially to an existing or projected air quality violation, and would have less than significant impact on air quality.

Table 3-10. Project Operation Emissions of Criteria Pollutants (lb/day)

Project Phase	CO	VOCs	NO _x	SO _x	PM ₁₀	PM _{2.5}
Operation Emissions	75.65	13.50	17.10	0.19	14.34	4.01
Threshold Significance	None	25	25	None	None	None
Significant?	No	No	No	No	No	No

Notes: CO carbon monoxide
 lb/day pounds per day
 NO_x oxides of nitrogen (nitric oxide and nitrogen dioxide)
 PM₁₀ respirable particulate matter less than 10 microns in diameter
 PM_{2.5} respirable particulate matter less than 2.5 microns in diameter
 SO_x oxides of sulfur (sulfur dioxide and sulfur trioxide)
 VOC volatile organic compounds

As identified in Table 3-10, the proposed project would not violate an air quality standard, nor would it contribute substantially to an existing or projected air quality violation. Therefore, project impact would be less than significant.

Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

The proposed project would result in significant cumulative impacts if it exceeds daily thresholds of significance established by VCAPCD or if it incurred in an increase of emissions beyond what is planned in the City of Oxnard General Plan. Since the proposed project's long-term emissions are less than established thresholds of significance, and its land use is not anticipated to provide for increase population growth above what is forecasted in the General Plan, the proposed project would not result in a cumulative considerable net increase of any criteria pollutant for which the region is non-attainment. Therefore, the proposed project would have less than significant cumulative impacts.

Would the project expose sensitive receptors to substantial pollutant concentrations?

The project site is surrounded by residential units in the north, agricultural/open space in the east, and by agricultural land in the south and west. The proposed project is a public school that qualifies as a sensitive receptor (i.e., a facility serving populations likely to suffer adverse health effects from pollution, such as children and the elderly). The location of the project site is not expected to expose students to sources of substantial pollutant concentrations (e.g., industrial facilities emitting odorous or hazardous substances). During construction, construction activities would generate particulate matter emissions resulting from the combustion of diesel fuel by construction equipment. Since nearby residents would be potentially exposed to these emissions a screening health risk assessment was conducted to determine impacts from these emissions. Additionally, operation of the proposed project has the potential to contribute significantly to traffic volumes in the nearby roadway system. Congested intersections have the potential to result in localized high levels of CO, which results from incomplete combustion of carbon containing fuels (e.g., gasoline and diesel). CO exposure can have a significant impact on sensitive receptors. To this end, a CO analysis was conducted for intersections expected to be impacted by the implementation of the proposed project.

Screening Health Risk Assessment (SHRA). A SHRA was conducted for the proposed project and is included in Appendix C. Table 3-11 includes a summary of calculated results and their evaluation against thresholds that if exceeded by the proposed project during construction could result in a significant impact on nearby residents. As presented in Table 3-11, emissions from construction sources are not anticipated to expose sensitive receptors in the nearby residential area to substantial pollutant concentrations.

Table 3-11. Screening Health Risk Assessment

Description	MICR	Cancer Burden	HIC, HIC8, HIA
Results	Residential: 6.19×10^{-6} Commercial: 1.19×10^{-8}	1.62×10^{-2}	3.62×10^{-3}
Threshold	Residential: 10×10^{-6} Commercial: 10×10^{-6}	<0.5	<1.0
Impact	No impact	No impact	No impact

Carbon Monoxide Analysis. To determine impacts associated with CO emissions, a CO analysis was conducted for operation of the six intersections listed below operating during the Interim Year (2021) Level of Service.

Victoria Avenue (North-South) at
 Gonzalez Road (East-West) – #1
 Doris Avenue (East-West) – #2
 Teal Club Road (East-West) – #3
 5th Street (East-West) – #4

Patterson Road (North-South) at
 Doris Avenue (East-West) – #7
 Teal Club Road (East-West) – #10

A summary of calculated CO concentrations, their comparison with the NAAQS for CO, and impact determination are provided in Table 3-12.

Table 3-12. Carbon Monoxide Analysis

Receptor Description	Carbon Monoxide Concentration (ppm)	Threshold (ppm)	Significant Impact?
Doris Patterson School	3.8	20	No
Oxnard High School	4.1	20	No
Residence on NE quadrant of Gonzalez Road and Victoria Avenue Intersection	6.4	20	No
Residence on NE quadrant of Doris Avenue and Patterson Avenue Intersection	4.1	20	No
Business on NE quadrant of 5th Street and Victoria Avenue	7	20	No
Business on SE quadrant of 5th Street and Victoria Avenue	5.8	20	No

Notes: ppm parts per million
NE northeast

Therefore, project impact would be less than significant.

Would the project create objectionable odors affecting a substantial number of people?

While the project would be adjacent to agricultural fields, the types of crops grown at these field are not anticipated to create objectionable odors in accordance with the listing for odorous land uses prescribed in the Ventura County Air Quality Guidelines. Emissions from construction equipment are not listed as odorous sources. Thus, the proposed project would not result in objectionable odors affecting a substantial number of people and project impact would be less than significant.

3.3.2.4 Cumulative Impacts

As noted above, the proposed project would not result in significant cumulative impacts since it does not exceed daily thresholds of significance established by VCAPCD or result in an increase in emissions beyond what is planned in the City of Oxnard General Plan and thereby the applicable AQMP. Project contribution toward cumulative impacts would be less than significant.

3.3.2.5 Mitigation Measures

AQ-1: During project construction the contractor shall ensure that:

- All soil excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil areas. Watering shall be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
- All clearing, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (mph) (averaged over one hour), if disturbed material is easily windblown, or when dust plumes of 20% or greater opacity impact public roads, occupied structures, or neighboring property.
- All fine material transported off-site shall be either sufficiently watered or securely covered to prevent excessive dust.
- All haul trucks shall be required to exit the site via an access point where a gravel pad or grizzly has been installed.
- Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.

- Once initial leveling has ceased, all inactive soil areas within the construction-site shall either be seeded and watered until plant growth is evident, treated with a dust palliative, or watered twice daily until soil has sufficiently crusted to prevent fugitive dust emission.
- On-site vehicle speed should be limited to 15 mph.
- All areas with vehicle traffic should be paved, treated with dust palliatives or watered a minimum of twice daily.
- Properly maintain and tune all internal combustion engine powered equipment;
- Require employees and subcontractors to comply with the CARB idling restrictions for compression ignition engines; and use California ultra-low sulfur diesel fuel; use construction equipment with Tier 2 engines; and use interior and exterior paint with a VOC content of 100 grams per liter.

3.3.2.6 Level of Impact After Mitigation

Mitigation Measure AQ-1 is provided to meet VCAQMD and CARB compliance requirements. The project impact would be less than significant.

3.4 BIOLOGICAL RESOURCES

This section describes existing biological resources within the proposed project site and provides an assessment of potential impacts to biological resources from implementation of the proposed project. For identified potential impacts, mitigation measures pursuant to the Federal Endangered Species Act (ESA), California ESA, and CEQA have been prescribed as applicable. The analysis provided herein is based on a review of pertinent background information for the site, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) data and U.S. Geological Survey (USGS) topographic maps, a project-specific biological site visit in July 2017, and the associated Initial Study that was completed prior to initiation of this DEIR.

3.4.1 Environmental Setting

3.4.1.1 Existing Conditions

The project site encompasses approximately 25 acres at the southeast corner of Doris Avenue and North Patterson Road within unincorporated Ventura County and within the City of Oxnard SOI area. The project site is currently comprised entirely of active or recently active agricultural land with heavily disturbed soils and is used for the production of row crops. No trees or naturally occurring or sensitive habitats are present within the project boundaries. Telephone poles are located at the western and southern borders of the site, which could serve as potential bird perching or nesting locations. No birds were observed utilizing these power poles and no nests were observed on or adjacent to the site during the site visit that was conducted on July 25, 2017.

One semi-wet three-foot-wide agricultural irrigation ditch was observed running along the southern site boundary. The ditch was heavily disturbed and sparsely inhabited by non-native grasses and other herbaceous weeds with predominantly bare soil. This agricultural ditch is expected to be ephemerally wet and the deepest location had less than 6 inches of water in July 2017. A smaller, dry, two-foot-wide agricultural ditch also runs along the western site border. The primary purpose of the drainage ditches is to serve as pathways for the movement and catchment of water during agricultural production; these ditches are not natural drainage features. The drainage from agricultural production is generally conveyed under unpaved access roads by small diameter culverts throughout the property, which are cumulatively directed toward a larger metal pipe culvert under Patterson Road that is outside of the project site to the southwest. If irrigation of the agricultural land ceased, the drainage ditches would not likely be able to support, transport, or shelter any water from the natural drainage of the surrounding landscape.

Land use surrounding the project site was also assessed during the biological site visit and with the use of aerial photography. Adjacent land uses to the west, south, and east are consistent with the current use of the project site and can be described as heavily disturbed agricultural land. The southern and eastern agricultural areas were in current use or being prepared for use, respectively. Residential uses comprise land north of the project site. One narrow landscaped ornamental tree stand is located approximately 80 feet north of the site, across Doris Avenue, which insulates the residential development from the road. The tree stand extends before and after the site and along the entire northern site boundary. The trees are maintained along a pedestrian sidewalk with landscaped grass below.

3.4.1.2 Regulatory Setting

Federal Regulations and Policies

Federal Endangered Species Act (ESA)

Title 16, United States Code, §1531 et seq., and Title 50, Code of Federal Regulations, part 17.1 et seq., designate and provide for the protection of threatened or endangered plant and animal species and their critical habitat. The ESA applies to federally-listed threatened or endangered species and their habitat, as well as designated critical habitat. The administering agency is the United States Fish and Wildlife Service (USFWS).

Federal agencies that permit, license, fund, or other authorize a project activity with potential impacts to these resources must consult with the USFWS to ensure that actions would not jeopardize any listed species or adversely affect critical habitat.

Federal Migratory Bird Treaty Act (MBTA)

Title 16, United States Code, §703 et seq., protects native bird species and their nests. All migratory birds and their parts (i.e., eggs, nests, and feathers) are fully protected under the MBTA. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale of any migratory bird or its parts, unless authorized under a valid permit. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (Title 50, Code of Federal Regulations, §10.13).

Section 401 of the Clean Water Act (CWA)

The Regional Water Quality Control Board (RWQCB) administers Section 401 of the CWA. Areas subject to RWQCB jurisdiction typically coincide with those of the U.S. Army Corps of Engineers (ACOE), including waters of the U.S. and wetlands. Under Section 401 of the CWA, every applicant for a federal permit or license for any activity which may result in a discharge to waters of the U.S. must obtain a State Water Quality Certification that the proposed activity will comply with state water quality standards.

Section 404 of the CWA

The ACOE regulates discharge of dredged and/or fill material into waters of the U.S. Pursuant to Title 33, Code of Federal Regulations, part 328, "waters of the U.S." are defined as: (1) all navigable waters; (2) all interstate waters and wetlands; (3) all impoundments of waters mentioned above; (4) all tributaries to waters mentioned above; (5) the territorial seas; and (6) all wetlands adjacent to the waters defined above. Discharge of dredged and/or fill material into waters of the U.S., including wetlands, requires authorization from the ACOE pursuant to Section 404 of the CWA. The ACOE does not generally assert jurisdiction over the following features: swales, erosional features, ditches excavated wholly in uplands that do not carry a permanent flow of water, non-tidal drainage and irrigation ditches on dry land, artificially irrigated areas that would revert to upland if irrigation ceased, artificial lakes or ponds created by excavating dry land, water-filled depressions created in dry land incidental to construction activity, and waste treatment ponds or lagoons.

State Regulations and Policies

California ESA

The California ESA is administered by the CDFW and prohibits take of plant and animal species identified as threatened or endangered in the State of California by the Fish and Wildlife Commission. "Take" of a species means to hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture or kill that species. The CDFW is a trustee agency under CEQA for biological resources throughout the state. Similar to the USFWS under the Federal ESA, the CDFW requires formal consultation under the California ESA for projects that may jeopardize or result in potential impacts to the continued existence of any state-listed species or adversely modify critical habitat.

Sections 1600-1616 of the California Fish and Game Code

The CDFW regulates all diversions or obstructions of natural stream flow or substantial changes to the bed, channel, or bank of any designated river, stream, or lake, or use of any material from the streambeds. CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses and lakes characterized by the presence of a definable bed and banks and existing fish or wildlife resources. Jurisdiction often extends to adjacent habitats. Human-made water bodies, unless located where natural features were previously located or are contiguous with existing or prior natural jurisdictional areas, are generally not included under CDFW jurisdiction. A CDFW Streambed Alteration Notification is required for all activities resulting in substantial effects to streambeds and their associated riparian habitats.

3.4.2 Impact Analysis

3.4.2.1 Methodology

The analysis contained within this Final EIR is based on a site visit conducted by Tetra Tech in July 2017 and the Initial Study prepared for the proposed project in May 2017. During preparation of the Initial Study, it was determined that the proposed project could potentially result in significant but mitigatable impacts associated with one of the criteria used in determining impact significance. This impact relates to potential adverse impacts to sensitive or special-status species. No comments were received on the biological resources portion of the Initial Study during the public review process.

The biological resources site visit was conducted from 10:30 AM to 1:30 PM on July 25, 2017. Weather conditions averaged about 72 degrees Fahrenheit throughout the survey with clear skies and 10 mile per hour winds. A query was performed on CDFW CNDDDB data prior to the site visit to identify special-status and sensitive plant and wildlife species that have been documented to occur within the Oxnard quadrangle and a five-quadrangle radius around the proposed project site. The site visit focused on assessing the project area for potential occurrence of special-status and sensitive species identified during the CNDDDB database query and habitats that could support those species.

3.4.2.2 Significance Thresholds

The thresholds for biological resource impacts used in this analysis are consistent with Appendix G of the CEQA Guidelines.

- *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*
- *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*
- *Would the project have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the Federal CWA or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?*

3.4.2.3 Project Impacts

The environmental impact analysis is based on the determination made in the Initial Study for issues that were determined to be potentially significant. Additional issues identified during the biological site visit that occurred as part of the EIR process are also discussed as follows.

Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The proposed project site consists of an active agricultural field, and is surrounded by agricultural uses to the west, south, and east, and residential development to the north. No candidate, sensitive, or special-status wildlife or plant species in any local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS were observed during the site visit in July 2017. Additionally, no suitable habitat for these species was found within or directly adjacent to the project site.

The ornamental tree stand north of the site and the telephone poles running along the western and southern borders of the site may serve as potential perching or nesting locations for birds. A visual survey of these locations was conducted from the project site during the site visit in July 2017, and no nests were observed. Small numbers of common birds were observed in-flight over the site, including house sparrow (*Passer domesticus*), song sparrow (*Melospiza melodia*), house finch (*Carpodacus mexicanus*), American crow (*Corvus brachyrhynchos*), and turkey vultures (*Cathartes aura*). A few American crow individuals were observed in the ornamental tree stand north of the project site.

No trees or shrubs are present on the project site, and therefore would not be removed as part of the proposed project. Existing ornamental trees and shrubs north of the project site and telephone poles to the west and south may provide suitable nesting bird habitat. Doris Avenue separates the project site from the ornamental tree stand and experiences heavy vehicle traffic. While the potential for significant impacts from project activities is low, the use of heavy machinery or activities that generate significant ground disturbance may disturb nesting birds if present. With implementation of Mitigation Measure BIO-1, project impact would be reduced to less than significant.

Would the project have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the Federal CWA or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?

No designated jurisdictional wetlands or wetland habitats are known to occur within or directly adjacent to the project site based on review of the CNDDDB and USFWS National Wetlands Inventory (NWI) databases. Agricultural ditches were found along the western and southern site boundaries during the July 2017 site visit. Both ditches are predominantly un-vegetated and heavily disturbed. The western ditch was noted as completely dry and the southern ditch had minor ponding (less than 6 inches of water). Since the ACOE does not typically assert jurisdiction over swales, erosional features, or ditches that were excavated primarily to drain uplands that do not carry a permanent flow of water, neither a CWA Section 401 nor 404 permit is anticipated to be required. Likewise, it is not anticipated that a permit pursuant to Section 1602 of the California Fish and Game Code would be required. However, the ACOE, CDFW, and RWQCB reserve the right to regulate these waters on a case-by-case basis. Therefore, if the ditches are determined to be under the jurisdiction of one or more of these agencies and are affected by project-related activities, then Mitigation Measures BIO-2 and BIO-3 will be required to reduce project impacts to less than significant.

3.4.2.4 Cumulative Impacts

Cumulative impacts are incremental effects of an individual project when combined with effects of past, current, and potential future projects. Because the project site is active agricultural land with very little quality habitat surrounding the site, cumulative impacts to biological resources are not anticipated.

3.4.2.5 Mitigation Measures

BIO-1: Prior to construction, the general contractor shall have a preconstruction nesting bird survey conducted by a qualified biologist, prior to the use of heavy machinery or significant ground disturbance, at the ornamental tree stand north of the site and at the telephone poles west and south of the site if activities are conducted within the breeding season for birds (February 15 – September 15). If any migratory or federally or state listed species birds are found to be actively nesting within 250 feet of the designated construction area, an appropriate exclusionary buffer around the active nest shall be established by the qualified biologist. The buffer distance will be determined based on the specific nesting bird species, and would be maintained until the birds have fledged from the nest. Active nests and buffers would be monitored initially by a qualified biologist to determine if active nests are being adversely affected by project activities.

BIO-2: Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the ACOE under CWA Section 404 so that a jurisdictional determination regarding the ditches can be made. If the ACOE determines that any of the ditches are jurisdictional, appropriate authorizations under the Nationwide Permit Program will be implemented. The Project Manager will also seek authorization from the RWQCB under CWA Section 401, if required.

BIO-3: Prior to disturbance of the on-site agricultural irrigation ditches, the Project Manager shall initiate coordination with the CDFW under Section 1602 of the California Fish and Game Code so that a jurisdictional determination regarding the ditches can be made. If the CDFW determines that any of the ditches are jurisdictional, a Streambed Alteration Agreement may be required.

3.4.2.6 Level of Impact After Mitigation

Based on the implementation of a nesting bird survey for heavy construction activities conducted within the bird breeding season, and coordination and/or consultation with the CDFW and ACOE for impacts to waters of the U.S., potential project impacts would be reduced to less than significant. The proposed project would not result in any other impacts to biological resources.

3.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section identifies cultural, tribal, and paleontological resources within the project and surrounding area, evaluates potential project-related impacts on those resources, and provides mitigation measures, as applicable. Cultural resources are defined as buildings, sites, structures, districts, and or objects that have historical, architectural, archaeological, cultural, or scientific significance. Tribal cultural resources are defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe. Paleontological resources include fossils of plant and animal remains of scientific significance.

3.5.1 Environmental Setting

Environment

The project site is located on the Oxnard Plain of Southern California within the Transverse Range province that is characterized by the east-west trending belt of mountains and uplands. The Oxnard Plain is part of the Ventura Basin, bounded by the Santa-Ynez-Topatopa Mountains to the north, the San Gabriel fault zone to the east, with a broad, flat, plain that slopes gently from the foothills to the coastline from which the Santa Barbara Channel separates the offshore islands from the mainland (Koury Geotechnical Services, Inc. 2014). The Santa Clara River is approximately 1.87-miles north of the project site. The Santa Clara River runs in a southwest direction across the Oxnard Plain to the Pacific Ocean. Vegetation consist of the coastal live oak woodland, chaparral, and coastal sage scrub communities. The Pacific Ocean is approximately 2.67 miles to the west. Based on the Geologic Map of the Oxnard 7.5' Quadrangle, Ventura County, California, the project site is underlain by Holocene age (10,000 years before present [BP] to recent) alluvial fan deposit composed of soils that are predominantly of clay with interbeds of sand and occasional gravel (Koury Geotechnical Services, Inc. 2014; Clahan et al. 2003). Soils within the Project site area are defined as Camarillo loam and are approximately 80 inches deep and consist of a surface layer of grayish-brown, calcareous sandy loam underlain by stratified sandy loam to sandy clay loam, and fine sand (USDA 1970; USDA NRCS 2017). Based on the recent geotechnical study, the entire project site is covered by approximately 24 inches of fill consisting of sandy silt, sandy lean clay, and fine silty sand underlain by alluvium (Koury Geotechnical Services, Inc. 2014).

Ethnography

The project site is within the vicinity of the Chumash, a group that occupied the region from San Luis Obispo to Malibu Canyon on the coast and inland to the western San Joaquin Valley, and the Santa Barbara Islands (Grant 1978). The Chumash territories are historically subdivided by distinct dialects. The project site is with the southernmost Chumash group, the Ventureño that occupied most of current day Ventura County and a portion of northern Los Angeles County. The Chumash people were of a maritime culture, built ocean-worthy canoes, and exhibited rich and complex ritual, sociopolitical, and economic systems with primary villages inhabited along the coastal territory of southern California with smaller settlements inland typically along water courses and habitats with favorable resources. Chumash structures were hemispherical in shape and constructed out of willow poles, sticks, and woven layers of tule (thatched) mats (Grant 1978). Prominent village sites located along the northern and southern western portion of the Oxnard Plain include *Shisholop* and *Muwu* that served as capitals, and *Wene'mu*. These villages served as the economic and social network links between island and inland inhabitants that were typically interconnected by marriage (Perry 2011). The Chumash inhabited the coastal and inland regions over several millennia until their aboriginal lifeways were disrupted by Spanish colonization and the Spanish Mission system and period (1769-1822), followed by the Mexican period (1822-1848), and eventual European migration (1848-present). Among the Chumash territory, five missions were established by the Spanish: San Buenaventura, Santa Barbara, Santa Ynez, La Purisima Concepcion, and San Luis Obispo (Kroeber 1925; Grant 1978).

Prehistoric Context

The cultural chronology of Southern California Santa Barbara Channel Islands and coastal inland and adjacent Transverse Ranges have been developed and contributed to by Wallace (1955, 1978), Moratto (1984), Warren (1968), Moriarty 1967, King (1981, 1990), Glassow et al. (2007), Arnold (1992, 1995), and many others. Chronological patterns are generalized in Table 3-13.

Table 3-13. A Generalized Chronology of the Santa Barbara Channel and Inland and Adjacent Transverse Ranges

Time Periods and Patterns	Date (approximate)	Characterization
Paleo Coastal	13,000-8,500 BP	This period is characterized by large, fluted points (e.g., Western Stemmed), crescents, domed scrapers, flake tools of local chert, and a lack of ground stone tools. Archaeological evidence indicates subsistence consisted of shellfish, hunting and gathering. There are very few recorded sites for this time period, most likely due to a mobile and low population.
Initial Early Period: Milling Stone Period	8500-6500 BP	This period is characterized by an expansion of the population and assemblages dominated by abundant ground stone artifacts, such as basin shaped milling slabs and well-shaped handstones (indicative of seed, nut, or agave processing), as well as hammerstones from cores, crude core tools, scrapers, plano-convex cores and bone tools, and Olivella shell bead (spire removed). Subsistence consist of shellfish, plant and seed gathering, and marine resource hunting to a lesser extent. Projectile points are typically rare in assemblages from this period, if occur typically leaf-shaped types.
Initial Early Period: Milling Stone Period-Altithermal	6500 to 5000 BP	Radiocarbon dates begin to decline possibly marking a decline in population due to environmental conditions that may have affected terrestrial and marine resources, dates begin to raise again at the end of this period.
Early Period	5000 to 3200 BP	This period is characterized by milling slabs and shaped manos and mortars (also bowl mortars) and pestles appear (possibly for use on large seeds, acorns or starch tubars), circular shell fishhooks, flaked tools, notched stone sinkers or net weights, shell beads (L-bead type), pipes, charmstones, bone whistles, large side notched and contracting stem projectile points, and quartz crystals. Subsistence included plant and seed gathering and large terrestrial and marine resources hunting. Shellfish were also collected and were an important resource. Mortuary practices (and associated grave cultural material) indicative of cultural complexity.

Table 3-13 (Continued). A Generalized Chronology of the Santa Barbara Channel and Inland and Adjacent Transverse Ranges

Time Periods and Patterns	Date (approximate)	Characterization
Middle Period: Intensive Technological and Social Developments	3200 to 800 BP	During this period technological and social developments occur. Assemblages are characterized by milling stones and handstones, stone effigies, charmstones, flaked tools, fishhooks (J and compound types), nets, <i>Haliotis</i> and <i>Olivella</i> shell beads (G-wall disc types), bone tools, ritual items, use of asphaltum, harpoons, and the introduction of the plank canoe, and the appearance of the bow and arrow (about 1400 BP), and contracting and leaf-shaped projectile points. During the latter part of this period shifts in subsistence focused on fishing and maritime economy with increased coastal settlements. Seasonal hunting and plant and seed gathering were also practiced.
Late Period (Late Prehistoric Horizon)	800 BP to contact	<p>This period is characterized by well-made mortar and pestles (specialized “flower pot” types-shaped pestles), flaked tools, concave base projectile points (cottonwood triangular types) microblade production (triangular forms), microblade drills, production of shell beads (K: cup-callas type) with stone disc used as spacers between beads, shell bead money and exchange, fishhooks, bone and stone ornaments, ritual items, complex sociopolitical and economic system, regional differentiation and small territories, large coastal villages and smaller inland settlements near the confluence of watercourses, estuaries, lagoons, and other inland resource habitats. Intensified subsistence: plant/seed gathering (acorn important) and terrestrial and marine resources hunting and fishing. Potential growth of seed-bearing plants was promoted through selective burning.</p> <p>Two-thirds of the Chumash population lived near the coast. Use of shell bead money, produced mostly on the Northern Channel Islands, indicates increased importance of trade between communities to buffer local shortfalls of wild food resources. Warfare resulting from trespass in hunting-gathering-fishing territories was prevalent at the time of European contact.</p>

Specifically, the earliest archaeological evidence for prehistoric habitation on the Oxnard Plain (within project study area) occurs during the Early Period, with most sites dating to the Middle or Late Periods. By the end of the Late Period, permanent prehistoric settlements on the Oxnard Plain were primarily located along the coastal perimeter. Occupations along the Oxnard Plain were advantageously positioned to facilitate access to travel routes and interactions between island (via plank canoe) and inland sites, and near areas that provided coastal marine, estuarine and terrestrial resources (Perry 2011). Research suggests that the Oxnard Plain was inhabited by at least the Early Period by prehistoric people that exploited available resources in the area; however,

archaeological sites are most likely buried by alluvial deposits and/or have been impacted by coastal erosion and rising sea levels (Perry 2011).

Historic Context

Spanish and Mission Period (1542-1834)

The first European explorer to visit the southern California coast belonged to the Spanish expedition party led by Juan Rodriguez Cabrillo in A.D. 1542. During the following two centuries, several other Spanish, Russian, and British expeditions explored northern and southern California but no settlements were established. In 1769, the Spanish Portal Expedition, led by Father President Junipero Serra, established the first colony and mission at present day San Diego (Castillo 1978). By the summer of 1769, the first 21 California Missions were founded as a result of the Portal Expeditions, from current day San Francisco Bay area to San Diego. As noted above, several missions were established by the Spanish along the southern California coast. Within the Chumash region, the Mission Period spanned from 1772 to the secularization of the missions by 1834. The Chumash were indoctrinated into the mission system as a source of forced labor under the auspices of religious conversion.

Mexican Period (1822-1848)

In 1821, Mexico successfully revolted against the Spanish crown, achieving independence and shifting Spanish holdings in North America (including California) to Mexico. After the secularization of the missions (1834-1836), land was distributed by the Mexican government to the Mexican colonist, as large "land grants" (also known as Ranchos). During this time, the Mexican economy in Southern California shifted to ranching and agriculture (Castillo 1978). The indigenous people that survived the mission systems and conditions, were not granted any mission lands, and many either left the area or worked as ranch laborers for the Mexican land owners. The Project site is within the Rancho El Rio de Santa Clara o la Colonia land grant (also known as La Colonia), no structures or features within the project site were observed on the map (Storr 1877).

American Period

After the signing of the Treaty of Guadalupe Hidalgo in 1848, California became a territory of the United States and many rancho families lost their land titles. The 1849, the California Gold Rush brought thousands of diverse immigrants to the state in search of gold and/or land to establish settlements. The increase of the immigrant population further decimated the indigenous population through disease, warfare, and acquisition of indigenous lands. The Project study area is within the fertile Oxnard Plain and many settlers were attracted to the agricultural possibilities of the land. By the late 1800s, several farms in Ventura County were growing agricultural crops such as corn, barley, flake, wheat, lima beans, strawberries, and beets by the turn of the century. The City of Oxnard was incorporated in 1903, initially cattle grazing occurred in the area and was soon replaced by agricultural crops that produced primarily sugar beets and other resources. Most of the agricultural land within the Oxnard Plain has been replaced by commercial and industrial use and residential subdivisions. The project site is currently used as an agricultural field.

Record Search

Identification efforts for this inventory included review of existing site records, previously conducted surveys in the area, historic maps, and homestead land patents. The record search study area includes the project APE and a 1-mile radius around the project APE.

On August 18, 2017, a literature and records search was conducted of the cultural resource site and project file collection at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System, at California State University, Fullerton, California (IC File Number 17953.4033) (Appendix D). As part of this records search, the SCCIC database of survey reports and overviews as well as documented cultural resources, cultural landscapes, and ethnic resources was consulted. Additionally, the search included a review of the following publications and lists: California Office of Historic Preservation (OHP) Historic Properties Directory/National Register of Historic Properties, OHP Archaeological Determinations of Eligibility, California

Inventory of Historical Resources/California Register of Historic Resources, California Points of Historical Interest, California Historical Landmarks, ethnographic information, historical literature, historical maps, and local historic resource inventories.

The records search revealed a total of 33 previous cultural resources investigations have been conducted within the Project study area. Of these surveys, one investigation (VN-02978: linear survey) has been conducted along the road boundary of the proposed project APE and one report is a general overview. The result of the survey (VN-02978) and record search did not identify any cultural resources within or adjacent to the project APE. The SCCIC search revealed two previously recorded historic sites, 56-153056 is a historic building and 56-151357 is the Oxnard, Henry T. Historic District and includes several historic buildings. Site 56-153056 was determined ineligible for the National Register of Historic Properties (NRHP) and remains unevaluated for the CRHR or local listing and is located approximately 0.65 mile southwest of the project APE. Resource 56-153056 is a NRHP listed district in the city of Oxnard and is over 1.3 miles from the project APE. No archaeological sites or CRHR eligible historic resources are recorded within the project's APE. All previous surveys are summarized in Table 3-14 and sites are summarized in Table 3-15.

Table 3-14. Previously Conducted Cultural Resource Investigations within the Project Study Area

IC Report #	Report Title/Description	Author/Company	Date	Proximity to APE
VN-000236	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease Ocs P-0202 and P-0216, Offshore Southern California Realignment of the Ventura Freeway (Highway 101), Ventura County	Stephen Horne/Dames & Moore	1980	Within 1 mile
VN-00459	A Cultural Resources Assessment of Portions of Camarillo and Oxnard Airports, Ventura County, California	Ronald M. Bissell/RMW Paleo Associates, Inc.	1985	Within 1 mile
VN-00470	Cultural Resources Survey and Impact Assessment for the Channel Islands Community Hospital EIR	Clay A. Singer	1985	Within 1 mile
VN-00513	Archival Search for a 31.8 Acre Parcel on the Northwest Corner of Ventura Road and Doris Avenue, Oxnard, California.	Leslie Mouriquand-Boldgett	1986	Within 1 mile
VN-00815	Report of Archaeological Reconnaissance Survey Of: Tentative Tract 4648 Oxnard, California	Roy A. Salls	1990	Within 1 mile
VN-00904	Report of Archaeological Reconnaissance Survey of Parcel 1, Tentative Parcel Map 90-5 Oxnard, California	Northridge Center for Public Archaeology, CSUN	1990	Within 1 mile
VN-00976	Cultural Resources Survey and Impact Assessment for the Proposed Realignment of the Doris Drain in the City of Oxnard, Ventura County, California	C.A. Singer & Associates, Inc.	1990	Within 1 mile
VN-00990	Cultural Resources Reconnaissance of a 20 Acre Parcel in the City of Oxnard, California.	Joan Brown/RMW Paleo Associates, Inc.	1991	Within 1 mile
VN-00991	Cultural Resources Reconnaissance of an 80 Acre Parcel in the City of Oxnard, California.	Joan Brown/RMW Paleo Associates, Inc.	1990	

Table 3-14 (Continued). Previously Conducted Cultural Resource Investigations within the Project Study Area

IC Report #	Report Title/Description	Author/Company	Date	Proximity to APE
VN-01005	Cultural Resources Reconnaissance of a 20 Acre Parcel in the City of Oxnard, California (Revised)	Joan Brown/RMW Paleo Associates, Inc.	1991	Within 1 mile
VN-01133	Cultural Resources Reconnaissance of a 51.03 Acre Parcel Located in Oxnard, Ventura County, California	Joan Brown/RMW Paleo Associates, Inc.	1992	Within 1 mile
VN-01136	Phase 1 Cultural Resources Survey 9.42 Acres Located at the SE Corner of Teal Club Road and Victoria Avenue (a.p.n. 183-0-090-575) Annexation #87-8 and Zone Change 767 Ventura County, California	MacFarlane Archaeological Consultants	1992	Within 1 mile
VN-01578	Historic Research and Review of the McLoughlin/ Maxwell Property, Located in Both Unincorporated Ventura County (250 Acres) and the City of Oxnard (80 Acres), Ventura County, California	Jeanette A. McKenna et al.	1998	Within 1 mile
VN-01583	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Northwest Golf Course Community Specific Plan Study Area, Oxnard, Ventura County, California	W & S Consultants	1997	Within 1 mile
VN-01819	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 504-11, County of Ventura, California	LSA Associates, Inc.	1999	Within 1 mile
VN-02008	NHPA Section 106 Review, Per FCC Direction of Sprint PCS Wireless Communications Facility No. Vr54x442d (Ilemon Grove Located at South East Corner of Victoria Avenue and Gonzales Road, Oxnard, California 93030)	Michael Brandman Associates	2001	Within 1 mile
VN-02017	Nextel Mobile Radio Facilities	Earth Touches	2001	Within 1 mile
VN-02021	Negative Archaeological Survey Report: Gold Coast Plaza	Compass Rose Archaeological, Inc.	2001	Within 1 mile
VN-02404	Records Search and Field Reconnaissance Phase for the Proposed Royal Street Communications Wireless Telecommunications Site La0931 (Oxnard P.A.I.), Located at 350 South K Street, Oxnard, Ventura County, California 93030	Robert J. Wlodarski	2006	Within 1 mile
VN-02434	Archaeological Survey Report of Approximately 44,000 Linear Feet for the Recycled Water Backbone System Project, City of Oxnard, Ventura County, California	Conejo Archaeological Consultants	2006	Within 1 mile
VN-02438	Phase I Archaeological Survey for the Rancho Victoria Study Area, Oxnard, Ventura County, California	W & S Consultants	2006	Within 1 mile
VN-02465	Cultural Resources Monitoring Program at the McLaughlin House, Oxnard, Ventura County	Jeanette A. McKenna et al.	2004	Within 1 mile

Table 3-14 (Continued). Previously Conducted Cultural Resource Investigations within the Project Study Area

IC Report #	Report Title/Description	Author/Company	Date	Proximity to APE
VN-02468	Archaeological Investigation for Tentative Tract	Greenwood & Associates	2003	Within 1 mile
VN-02473	Phase I Archaeological Investigation: 2425 West 5th Street, Oxnard, CA	Compass Rose Archaeological, Inc.	2010	Within 1 mile
VN-02478	Phase I Archaeological Survey of a 47 Acres Parcel at West Fifth Street and Patterson Road, Oxnard, Ventura County California	W & S Consultants	2003	Within 1 mile
VN-02627	Native American Place names in the Vicinity of the Pacific Pipeline: Part 2: Gaviota to the San Fernando Valley: Draft	Topanga Anthropological Consultants	1993	Within 1 mile
VN-02679	A Phase I Archaeological Study for Store 07449, Located at 481 South Ventura Road City of Oxnard, County of Ventura, California	Robert J. Wlodarski	2008	Within 1 mile
VN-02796	Moorpark-Shelline-Valdez 66kV New Pole Installation/ Old Pole Removal and WO 6039-4800; 9-4857 Deteriorated Pole Replacements, Various Distribution Circuits, Ventura County, California	Compass Rose Archaeological, Inc.	2009	Within 1 mile
VN-02884	Draft Cultural Resources Survey for the Proposed Oxnard Airport Land/Easement Acquisition Project, City of Oxnard, Ventura County, California	SWCA Environmental Consultants	2009	Within 1 mile
VN-02933	Phase I Archaeological Investigation for the City of Oxnard Recycled Water Project New Alignment	Compass Rose Archaeological, Inc.	2011	Within 1 mile
VN-02978	Groundwater Recovery Enhancement and Treatment (GREAT) Program, Cultural Resources Inventory Report	CH2M Hill	2004	Linear survey within project APE (near north and west boundary)
VN-03023	Verizon Wireless-Teal Club, 3551 West 5 th Street	URS	2011	Within 1 mile
VN-03054	Cultural Resource Records Search and Site Survey AT&T Site SBOV62 (36309) Oxnard Airport, 3151 West 5th Street Oxnard, Ventura County, California	ACE Environmental	2012	Within 1 mile

Table 3-15. Previously Recorded Sites within the Study Area

Primary No.	Site Type	Resource Description	Recorder/Date	NRHP or CRHR Eligibility	Proximity to APE
P-56-151357	District	Oxnard, Henry T Historic District (137 contributing historic buildings)	Cultural Heritage Board/1981 Friends of Old Oxnard/1998	NRHP Listed	1.31 mile
P-56-153056	Building	Consulado de México/Durham School Service	ACE Environmental/2012	Not Eligible NRHP	0.65 mile

Historic Map and Patent Review

The maps listed in Table 3-16 were reviewed for the project. No patents were identified within the project study area. Historic land use includes rural roads, agricultural use, rural buildings, and the Ventura County Airport. Historic to modern land use of the APE appears as undeveloped agricultural land.

Table 3-16. Reviewed Historic Maps

Map Name	Date	Author	Proximity to APE
United States Geological Survey, 15 Minute Topographical Map Hueneme	1904	USGS Staff	The project site and adjacent areas appear as undeveloped land. Oxnard is illustrated to the east.
United States Geological Survey, 7.5 Topographical Map Oxnard, Calif.	1949	USGS Staff	The project site appears vacant and no structures or features are illustrated within or adjacent to the project APE. An east to west trending road (North Road) is to the north, and a north south trending road is to the east (Patterson Road). Ventura Road, Highway 101, several buildings, Ventura County Airport, and the city of Oxnard is approximately 0.50 to 1 mile east of the project APE. The Santa Clara River is illustrated to the northwest and north. Vacant land is illustrated to the west.
United States Geological Survey, 7.5 Topographical Map Oxnard, Calif.	1952	USGS Staff	Same as above, no changes.

Native American Heritage Commission Outreach

An important part of CEQA is consultation with the NAHC and the local Native American community. On July 28, 2017, Tetra Tech contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands file search. The NAHC responded on August 23, 2017 that results of the sacred land file search was negative and no cultural resources were identified by their search as within the proposed project APE or study area (Appendix D). A list of six Native American contacts was also provided. A Project outreach letter was sent to each of the individuals listed by the NAHC on September 22, 2017. The letter provided information regarding the Project and a request for information about any known cultural resources in the Project study area. The outreach letters are for informational purposes only and do not take the place of formal consultation under AB 52 between the lead agency and tribes. Outreach to these contacts and meaningful discussions may reveal tribal cultural resources that could be impacted by the proposed project, or provide community concerns regarding the project's treatment of cultural resources. We received two responses: 1) from Patrick Tumamait on October 9, 2017, indicating that

he would like to be notified in the event of an inadvertent discovery and of any project updates or changes; and 2) from Freddie Romero, who deferred comments to local tribe.

Tribal Cultural Resources and AB 52 Consultation

Under the California Environmental Quality Act, Assembly Bill (AB) 52 requires a lead agency to evaluate a project's potential to impact "tribal cultural resources". In addition, AB 52 requires the lead agency to consult with any California Native American tribe that has previously requested that the lead agency provide the tribe with notice of such projects and consultation, and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussion of the type of environmental review necessary, significance of tribal cultural resources, and significance of the project's impacts on the tribal cultural resources (as applicable), and alternatives and mitigation measures recommended by the tribe. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. Pursuant to State requirements, Native American consultations should be initiated early in the planning process and should be conducted by the lead State/public agency, if agency consultation has been requested by a California Native American tribe (per Assembly Bill 52, PRC 210803, Section 1.2).

The District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. On May 2, 2017, Lisa Cline, Deputy Superintendent of the District, sent Anthony Morales, Chief of the San Gabriel Band of Mission Indians, a letter initiating formal project notification and requesting tribal consultation pursuant PRC 210803.1 (d), and AB 52 (as amended) for the project (Appendix B). To date, no comments have been received from Mr. Morales.

3.5.1.1 Regulatory Setting

The proposed Project is located on private land and will require state and local permitting. There are numerous state regulations and policies that direct management of cultural resources by state and local agencies. The following is a discussion of applicable state and local regulations.

State

California Register of Historical Resources

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource is at least 45 years old and meets the criteria for listing on the California Register of Historical Resources (CRHR; PRC, § 5024.1, and Title 14 California Code of Regulations [CCR], Section 4852) including the following:

2. An association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
3. An association with the lives of persons important to local, California, or national history.
4. An embodiment of the distinctive characteristics of a type, period, region, or method of construction, or a representation of the work of a master, or possesses high artistic values.
5. A resource that has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

If an archaeological resource does not fall within the definition of a historical resource, it may meet the definition of a "unique archaeological resource" (Public Resources Code [PRC] 21083.2(g)). Unique archaeological resources includes archaeological artifacts, objects, or sites that:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or;

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Assembly Bill 52

Assembly Bill (AB) 52 provides for the consideration of tribal cultural resources during the CEQA process by adding or amending the PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 5097.94. This bill specifies that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. The bill requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project prior to determining whether a negative declaration, mitigated negative declaration (MND), or environmental impact report is required for a project. This requirement is applicable if the tribe has requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation. The bill also specifies examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. Tribal cultural resources are any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - Included or determined to be eligible for inclusion in the CRHR.
 - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- A cultural landscape that meets the criteria of CRHR, is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

California Public Resource Code

In addition to the PRC sections affected by AB 52, several other sections regulate cultural resources. California PRC Section 5020-5029.5 establishes the criteria for the CRHR, creates the California Historic Landmarks Committee, and authorizes the Department of Parks and Recreation to designate Registered Historical Landmarks and Registered Points of Historical Interest. It also establishes criteria for the protection and preservation of historic resources. Several other sections of the California Public Resource Code also provide protection of cultural resources. Section 5097-5097.6 provides guidance for state agencies in the management of archaeological, paleontological, and historical sites affected by major public works project on state land.

Subsections 5097.9-5097.991 establish regulations for the protection of Native American religious places and establishes the NAHC. They also require that California Native American remains and associated grave artifacts be repatriated and that notification of discovery of Native American human remains be made by the NAHC to a most likely descendant (MLD). Subsection 5097.993-.994 establishes fines or both fine and imprisonment for the unlawful excavation, removal, or destruction of Native American archaeological or historic sites on public or private lands.

Senate Bill 922

Senate Bill 922 exempts from California Public Records Act information pertaining to Native American graves, cemeteries, archaeological sites, and sacred places in the possession of the California NAHC and other state or local agencies.

Senate Bill 18

California State Senate Bill 18 (SB18), signed into law in September 2004 and implemented on March 1, 2005, requires cities and counties to notify and consult with California-recognized Native American Tribes about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places. The

Governor's Office of Planning and Research was mandated to amend its General Plan Guidelines to include the stipulations of SB18 and to add advice for consulting with California Native American Tribes.

Administrative Code, Title 14, Section 4307

Administrative Code, Title 14, Section 4307 prohibits individuals from removing, injuring, defacing, or destroying any object of paleontological, archaeological, or historical interest or value.

Government Code, Sections 6253, 6254, and 6254.10

Government Code, Sections 6253, 6254, and 6254.10 states that disclosure of archaeological site information is not required for records that relate to archaeological site information maintained by the Department of Parks and Recreation, the State Historical Resources Commission, or the State Lands Commission.

Penal Code, Title 14, Section 622.5

Penal Code, Title 14, Section 622.5 establishes as a misdemeanor offense for any person, other than the owner, who willfully damages or destroys archaeological or historic features on public or privately-owned land.

California Health and Safety Code, Section 7050.5-7052 and 8010-8011

Several sections of the California Health and Safety Code provide protection of human remains. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC within 24 hours. Section 7052 of the Health and Safety Code states that it is a felony to disturb Native American burials. Section 8010-8011 establishes a state repatriation policy to ensure that all California Indian human remains and cultural items are treated with dignity and respect and encourages voluntary disclosure and return of remains and cultural items by publically funded agencies and museums in California.

California Code of Regulations, Section 1427

California Code of Regulations, Section 1427 recognizes that California's archaeological resources are endangered by urban development and that these resources need preserving. This section establishes as a misdemeanor the willful injury, disfigurement, defacement, or destruction of any object or thing of archaeological or historical interest or value by someone who is not the owner, whether situated on private lands or within any public park or place. It also states that it is a misdemeanor to alter any archaeological evidence found in any cave or to remove any materials from a cave.

Senate Concurrent Resolution Number 43

Senate Concurrent Resolution Number 43 requires all state agencies to cooperate with programs of archaeological survey and excavation, and to preserve known archaeological resources whenever reasonable.

Local

City of Oxnard Regulations

The City of Oxnard California General Plan (City of Oxnard 2011) identifies goals and policies pertaining to cultural resources within the City. The following summarizes the requirements for compliance with the City policies that may be applicable to the proposed Project.

Goal ER 11: Protect the City's cultural and historic resources from unnecessary encroachment or harm and if encroachment or harm is necessary, fully mitigate the impacts to the maximum extent feasible. The following polices apply to Goal ER 11:

ER 11.1 Archaeological Resource Surveys. Requires a qualified archaeologist to perform a cultural resources study prior to project approval. Inspection for surface evidence of archaeological deposits, and

archaeological monitoring during grading should be required in areas where significant cultural resources have been identified or are expected to occur.

ER 11.2 Requires Mitigating the Impact of New Development on Cultural Resources. Ensures that alternatives are considered, including planning construction to avoid archeological sites, deeding archaeological sites into permanent conservation easements, and planning parks, greenspace, or other open space to incorporate archaeological sites in the event that development threatens significant archaeological resources.

ER 11.3 Development Applicants to Conduct Research. Requires project applicants to have a qualified archaeologist conduct a record search at the South Central Coast Information Center located at California State University Fullerton and other appropriate historical repositories, conduct field surveys where appropriate, and prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archaeological Resource Management Reports) prior to project approval.

ER 11.4 Historic Preservation. Support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and districts. Where applicable, preservation efforts shall confer with the Ventura County Cultural Heritage Board and conform to the current Secretary of the Interior's Standards for Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Building and the California Office of Historic Preservation.

ER 11.5 State Historic Building Code for Adaptive Reuse. Utilize, when possible, the State Historic Building Code for historic properties to encourage adaptive reuse.

ER 11.6 Identification of Archaeological Resources. In the event that archaeological/ paleontological resources are discovered during site excavation, continue to require that grading and construction work on the project site is suspended until the significance of the features can be determined by a qualified archaeologist/paleontologist.

ER 11.7 Native American Remains. Requires compliance with State laws relating to the disposition of Native American burials consistent with the CEQA Guidelines (Section 15064.5) if human remains of possible Native American origin are discovered during project construction.

ER 11.8 Historical Resource Inventory. Maintain a historical resource inventory, discourage demolition or alteration of historical buildings unless they are declared unsafe, and strongly encourage rehabilitation and/or adaptive reuse.

3.5.2 Impact Analysis

3.5.2.1 Methodology

The methodology for identifying historic resources within the project site area of potential effect (APE) include a record search, NAHC sacred lands search and tribal outreach, and formal consultation under AB 52. An archaeological survey was not conducted for the project site due to native soils that are overlain by approximately 24 inches of fill (Koury Geotechnical Services, Inc. 2014) and agricultural disturbance, obscuring the surface visibility of intact cultural material.

Area of Potential Effect

The area of potential direct impacts related to the project would include all areas of proposed vertical and horizontal ground disturbance. Construction laydown and staging areas will be located directly on the project site. Based on the geotechnical report, native soils throughout the proposed building footprints should be excavated a minimum of 6 feet below existing grade or 4 feet below the bottoms of foundations, whichever is deeper. Indirect impacts are considered for adjacent properties.

3.5.2.2 Significance Thresholds

The following thresholds of significance is provided in Appendix G of the CEQA guidelines and the City of Oxnard CEQA guidelines (City of Oxnard 2017) and states that a project is considered to have a significant impact on Cultural Resources if it is found to:

- Cause a substantial adverse change in the significance of a historical resource as defined in CCR 15064.5 (b). Specifically, substantial significant impact to cultural resources would include physical demolition, destruction, relocation, or alteration of the resource or its immediate surrounds such that the significance of the historical resource would be materially impaired;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR 15064.5. Specifically, if the lead agency determines that the archaeological site is an historical resource;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of dedicated cemeteries;

In addition, Appendix G of the CEQA guidelines states, pursuant to AB 52, would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.5.2.3 Project Impacts

Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

The project site lacks any buildings or structures and is currently used for agriculture row crops. The records search and NAHC sacred lands search did not identify any known historical resources within or adjacent to the project APE. One historical resource (P-56-151357) and one potential historical resource (P-56-153056) have been recorded in the study area outside of the APE. However, neither resource is anticipated to be indirectly impacted by the Project due to their distance from the APE. As a result, the proposed project would not cause a substantial adverse change in the significance of a known historic resource as defined in Section 15064.5 of the CEQA Guidelines and no mitigation is required.

Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The records search, NAHC sacred land search, and tribal outreach did not identify any archaeological sites within or adjacent to the project APE. Based on a previous geotechnical study (Koury Geotechnical Services, Inc. 2014; Earth Systems Southern California 2017), the project APE is overlain with approximately 0-24 inches of fill soil (agricultural) consisting of silty sand to sandy silt, and the surface soils have been altered by previous agricultural related ground disturbance (disced and plowed) to a depth of approximately 0-30 inches (plow zone). Surface soils consist of silty sand to sandy silt, sandy lean clay, and fine silty sand underlain by alluvial soils. Due to the fill soils mixed by previous agricultural disturbance covering the site and the lack of native soil surface visibility, an archaeological survey was not conducted of the APE. However, the project site is located in an active depositional setting, and buried archaeological (prehistoric or historic) materials may be present in previously undisturbed native soils beneath the fill soils. Disturbance of these intact buried resources would be a significant impact. Incorporation of Mitigation Measures CUL-1 (Worker Environmental Awareness Training) and CUL-2 (Archaeological Monitoring) would avoid this significant potential impact on archaeological resources.

Would the project disturb any human remains, including those interred outside of formal cemeteries?

There are no known human remains or burials within the project APE. The record search nor the NAHC sacred land file search identified any known burials or recorded human remains. Nonetheless, as with archaeological resources, it is possible that previously unknown human burials or remains could be disturbed on-site during project construction. As previously discussed, human occupation within the Oxnard Plain has been documented to at least 5000 years ago and likely included the project APE.

California state law requires all project excavation activities to halt if human remains are encountered and the County Coroner must be notified. Any discovery of human remains on the project site would be treated in accordance with PRC Section 5097.98 and Section 7050.5 of the State Health and Safety Code. Pursuant to State HSC § 7050.5, if human remains and/or cultural items defined by the Health and Safety Code, Section §7050.5, are inadvertently discovered during construction activities, all work within a 100-foot radius of the find or an area reasonably suspected to overlie adjacent remains (whichever is larger) will cease, the find will be flagged and protected for avoidance, and the Ventura County Coroner will be contacted immediately. The remains must be securely protected and project personnel must ensure confidentiality of the find on a need-to-know basis and ensure that the remains are treated with dignity and that they are not touched, moved, photographed, discussed on social media sources (e.g., Facebook, Twitter), or further disturbed. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the MLD as stipulated by California PRC Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Construction will not proceed within the 100-foot area (or protected area) around the discovery until the appropriate approvals are obtained. Work may be delayed in the vicinity of the human remains for up to 30 days.

The specific State law/regulations regarding proper handling of previously unknown human remains encountered during construction are specified above and the project will comply with the state law/regulations to avoid significant impacts on human remains. In conjunction with the training and monitoring protocols identified in Mitigation Measures CUL-1 and CUL-2, potential impacts to unknown human remains is less than significant.

Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

In Ventura County, paleontological remains, typically identified in Pleistocene-age alluvial deposits, include examples from throughout most of geological history, including the Paleozoic (600-225 million years ago), Mesozoic (225-70 million years ago) and Cenozoic (70 million years ago-present) eras. Based on the geological map of Ventura County, Oxnard quadrangle, the project site is underlain by Holocene age (10,000 years BP to recent) alluvial fan deposits composed of soils that are predominately of clay with interbeds of sand and occasional gravel (Koury Geotechnical Services, Inc. 2014; Clahan 2003). Holocene deposits may overlie older alluvium of Pleistocene age (2.6 million years ago to 10,000 years BP). Holocene age deposits are considered to have a low sensitivity for yielding paleontological resources. In 2010, a paleontological record search of the museum collection records maintained by the Natural History Museum (NHM) of Los Angeles County was conducted for the Oxnard Airport Land Easement Acquisition Project, approximately 0.40 miles south of the project site (SWCA 2009). The record search included a one-mile radius around the airport and indicated that no previously identified paleontological localities occurred within the search area, nor had any resources been reported within the same Holocene age geological unit as the current project APE (SWCA 2009). Based on the Holocene-age deposits, surficial ground disturbance is unlikely to encounter or cause a substantial adverse change in significance to a paleontological resource. However, if project ground disturbing construction depths exceed the Holocene age deposits or encounters shallow Pleistocene deposits, paleontological resources may be exposed. Paleontological resources in Ventura County include many widely dispersed outcrops of fossil bearing

formations (Ventura 2011). Incorporation of Mitigation Measures CUL-3 (Paleontological Resource Impact Mitigation Program) would avoid this significant potential impact on archaeological resources.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- A) *listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?***

The records search, NAHC sacred lands search, and AB 52 consultation did not identify any historical resources within or adjacent to the project APE. The District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. We received one response from Patrick Tumamait on October 9, 2017, indicating that he would like to be notified in the event of an inadvertent discovery and of any project updates or changes. As a result, it is believed the proposed project would not cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5020.1 (k) and no mitigation is required.

- B) *a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

The records search, NAHC sacred lands search, and AB 52 consultation between the lead agency and Mr. Morales did not identify any significant tribal cultural resources within or adjacent to the project APE. The District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. We received one response from Patrick Tumamait on October 9, 2017, indicating that he would like to be notified in the event of an inadvertent discovery and of any project updates or changes. As a result, the proposed project is not anticipated to cause a substantial adverse change in the significance of a known historic resource as defined in PRC 5024.1 and no mitigation is required.

3.5.2.4 Cumulative Impacts

Cultural Resources and Tribal Resources

Based on the literature and records review (as described above), the project site is in a part of coastal California with documented prehistoric and historic occupation. The cumulative impact study area for cultural resources is coastal Ventura County and the Channel Islands (specifically, the Oxnard Plain), covering areas occupied by Native Americans through historic contact and immigrant populations (e.g. Europeans, Mexicans). Although no historic or archeological resources are documented in the project APE, unidentified buried resources may exist. Varied cultural resources are documented throughout this part of coastal California suggesting it is a highly sensitive region for archaeological resources.

The proposed project would not result in impacts to previously documented archeological and historic resources or human burials, but could result in impacts to those types of resources as a result of disturbance of native soils during project construction. This type of impact would be significant. However, with implementation of Mitigation Measures CUL-1, CUL-2 and CUL-3, those impacts would not be significant. As such, the project is not anticipated to contribute significantly to cumulative impacts on cultural resources in the region.

Paleontological Resources

Project construction excavation exceeding Holocene deposits would potentially result in the unearthing of significant paleontological resources. Those effects would be mitigated through implementation of a

Paleontological Resource Impact Mitigation Program (PRIMP) as detailed in Mitigation Measure CUL-3. In addition, scientific knowledge gained based on the study and evaluation of fossils potentially removed from the cited formations/units during the construction of the project would be a beneficial effect of the project.

The grading and excavation for other projects and development in areas where formations/units with Pleistocene fossil bearing deposits occur also have the potential to result in the unearthing, removal, and possible destruction of significant paleontological resources from one or more of such fossil bearing deposits. Those effects would also be required to be mitigated through implementation of a similar project-specific PRIMP. In addition, scientific knowledge gained based on the study and evaluation of fossils potentially removed from the cited formations/units during the construction of the cumulative projects would be beneficial effects of those projects. For these reasons, potential cumulative impacts to paleontological resources would be less than significant.

3.5.2.5 Mitigation Measures

The proposed project would not result in impacts to previously documented archeological and historic resources or human remains but could result in impacts to those types of resources as a result of disturbance of native soils during project construction. Without knowing what types of previously unknown cultural resources or human remains might be disturbed by the project construction, would be significant adverse impacts on prehistoric and/or historic resources and/or human remains before mitigation.

Project construction excavation exceeding Holocene deposits would potentially result in the unearthing of significant paleontological resources. Those would be significant adverse impacts of the project on paleontological resources before mitigation.

CUL-1: Worker Environmental Awareness Training: Prior to any proposed construction ground disturbing activities within the Project APE, the District Project Manager will require the construction contractor to provide for all non-cultural resources personnel to be briefed, by a qualified project archaeologist (retained on-call by construction contractor) about the potential and procedures for an inadvertent discovery of prehistoric and historic archaeological resources. In addition, the training will include established procedures for temporarily halting or redirecting work in the event of a discovery, identification and evaluation procedures for finds, and a discussion on the importance of, and the legal basis for, the protection of archaeological resources. Personnel will be given a training brochure/handout regarding identification of cultural resources, protocols for inadvertent discoveries, and contact procedures in the event of a discovery.

CUL-2 Archaeological Monitoring Plan and Monitoring: If proposed project construction ground disturbing activities will reach depths containing undisturbed native soils (below 24 inches), the qualified project archaeologist will prepare an archaeological monitoring plan and a qualified archaeological monitor and Native American monitor (if requested) will be present on-site during ground disturbing activities that occur within native soils. If any cultural resources are identified by the monitor(s) during ground disturbing activities, the resource will be treated as an inadvertent discovery and the protocols outlined in the monitoring plan will be adhered to. In general, if cultural resources are encountered during ground disturbing activities in native soils, the archaeological monitor will stop work within 100-feet of the find in order to assess its significance. Construction activities can continue outside the established 100-foot radius exclusion zone. Work may not resume within the 100 foot exclusion zone until the project archaeologist can evaluate the significance of the find and complete any necessary recordation and evaluation of the find (may include recording, testing and/or data recovery efforts) in consultation with the Oxnard School District. Construction will not proceed within the 100-foot area around the discovery until the appropriate approvals are obtained. Patrick Tumamait of the Barbareno Ventureno Band of Mission Indians has requested to be notified in the event of an inadvertent discovery. If requested by interested Tribes, a Native American Monitor will also be present during construction ground disturbing activities. A final report documenting the results of the monitoring program will be prepared by the qualified project archaeologist.

CUL-3 Paleontological Resource Impact Mitigation Program: Prior to any ground-disturbing activities, the District Project Manager will require the construction contractor to have a PRIMP prepared by a qualified

paleontologist if project construction will exceed Holocene soils. The qualified paleontologist will also attend the worker environmental awareness program training and provide information on paleontological resources and a brochure/handout outlining procedures in the event of a paleontological find during construction. The District Project Manager will require the construction contractor to initiate implementation of the PRIMP at the beginning of ground disturbing activities. The PRIMP will address and define the following specific activities and responsibilities:

- Full-time monitoring by a qualified paleontologist during all grading and excavation extending more than 10 feet (ft) below ground surface (bgs) or beyond Holocene deposits.
- Spot-check monitoring by a qualified paleontologist for all grading and excavation between 5 and 10 ft bgs to determine whether older sediments with a potential to contain paleontological resources are present.
- Procedures for project personnel and/or paleontological monitor to halt work and temporarily redirect construction away from an area if paleontological resources are encountered during grading or excavation in order to assess the significance of the find.
- Procedures for recommendations regarding level of monitoring effort (e.g. spot check, full-time) depending upon sensitivity of soil depth, identification of finds, etc.
- Procedures for handling collected material and curation.
- Procedures for reporting and documenting the results of the monitoring program.
- Provide brochure of environmental awareness training.

The proposed project would not result in impacts to previously documented archeological and historic resources or human remains but could result in impacts to those types of resources as a result of disturbance of native soils during project construction. Without knowing what types of previously unknown cultural resources or human remains might be disturbed by the project construction, would be significant adverse impacts on prehistoric and/or historic resources and/or human remains before mitigation.

Project construction excavation exceeding Holocene deposits would potentially result in the unearthing of significant paleontological resources. Those would be significant adverse impacts of the project on paleontological resources before mitigation.

CUL-1: Worker Environmental Awareness Training: Prior to any proposed construction ground disturbing activities within the Project APE, the District Project Manager will require the construction contractor to provide for all non-cultural resources personnel to be briefed, by a qualified project archaeologist (retained on-call by construction contractor) about the potential and procedures for an inadvertent discovery of prehistoric and historic archaeological resources. In addition, the training will include established procedures for temporarily halting or redirecting work in the event of a discovery, identification and evaluation procedures for finds, and a discussion on the importance of, and the legal basis for, the protection of archaeological resources. Personnel will be given a training brochure/handout regarding identification of cultural resources, protocols for inadvertent discoveries, and contact procedures in the event of a discovery.

CUL-2 Archaeological Monitoring Plan and Monitoring: If proposed project construction ground disturbing activities will reach depths containing undisturbed native soils (below 24 inches), the qualified project archaeologist will prepare an archaeological monitoring plan and a qualified archaeological monitor and Native American monitor (if requested) will be present on-site during ground disturbing activities that occur within native soils. If any cultural resources are identified by the monitor(s) during ground disturbing activities, the resource will be treated as an inadvertent discovery and the protocols outlined in the monitoring plan will be adhered to. In general, if cultural resources are encountered during ground disturbing activities in native soils, the archaeological monitor will stop work within 100 feet of the find in order to assess its significance. Construction activities can continue outside the established 100-foot radius exclusion zone. Work may not resume within the 100 foot exclusion zone until the project archaeologist can evaluate the significance of the find and complete any necessary recordation and evaluation of the find (may include recording, testing and/or data recovery efforts) in consultation with the Oxnard School District. Construction will not proceed within the 100-foot area around the

discovery until the appropriate approvals are obtained. Patrick Tumamait of the Barbareno Ventureno Band of Mission Indians, requested to be notified in the event of an inadvertent discovery. If requested by interested Tribes, a Native American Monitor will also be present during construction ground disturbing activities. A final report documenting the results of the monitoring program will be prepared by the qualified project archaeologist.

CUL-3 Paleontological Resource Impact Mitigation Program: Prior to any ground-disturbing activities, the District Project Manager will require the construction contractor to have a PRIMP prepared by a qualified paleontologist if project construction will exceed Holocene soils. The qualified paleontologist will also attend the worker environmental awareness program training and provide information on paleontological resources and a brochure/handout outlining procedures in the event of a paleontological find during construction. The District Project Manager will require the construction contractor to initiate implementation of the PRIMP at the beginning of ground disturbing activities. The PRIMP will address and define the following specific activities and responsibilities:

- Full-time monitoring by a qualified paleontologist during all grading and excavation extending more than 10 ft bgs or beyond Holocene deposits.
- Spot-check monitoring by a qualified paleontologist for all grading and excavation between 5 and 10 ft bgs to determine whether older sediments with a potential to contain paleontological resources are present.
- Procedures for project personnel and/or paleontological monitor to halt work and temporarily redirect construction away from an area if paleontological resources are encountered during grading or excavation in order to assess the significance of the find.
- Procedures for recommendations regarding level of monitoring effort (e.g. spot check, full-time) depending upon sensitivity of soil depth, identification of finds, etc.
- Procedures for handling collected material and curation.
- Procedures for reporting and documenting the results of the monitoring program.
- Provide brochure of environmental awareness training

3.5.2.6 Level of Impact After Mitigation

Based on implementation of, and compliance with, Mitigation Measures CUL-1, CUL-2, and CUL-3, the potential impacts during construction of the proposed project on previously unknown cultural resources and human remains on the project site would be reduced to less than significant.

Based on implementation of, and compliance with, Measure CUL-3, the potential impacts during construction of the proposed project to paleontological resources would be reduced to less than significant.

3.6 GEOLOGY AND SOILS

This section provides a discussion of existing geologic and soils conditions and an analysis of potential impacts from implementation of the proposed project. Section 3.6 also addresses the potential for structural damage due to the underlying local geology, potential ground settlement, expansive soils, and regional seismic hazards. This section summarizes information provided in the Engineering Geology and Geotechnical Engineering Report for Proposed Middle School, Southeast Corner of Doris Avenue and Patterson Road, Oxnard, California (Geotechnical Report) prepared by Earth Systems Southern California, Inc. (ESSC 2017). The Geotechnical Report is included in Appendix E of the EIR.

3.6.1 Environmental Setting

The project site is relatively flat, and slopes gently to the south and southwest, with surface elevations ranging from approximately 40 to 45 feet above mean sea level (amsl). The project site is currently being used for agricultural production of row crops (vegetables, most recently cabbage) and contains sparse non-native vegetation at the margins (weeds and grasses).

The proposed project is located on the Oxnard Plain area of Ventura County. The Oxnard Plain is part of the Ventura Basin which is bounded on the north by the Santa Ynez-Topatopa Mountains and on the south by the Channel Islands, the western Santa Monica Mountains, and the Simi Hills. To the east, the basin is bounded by the San Gabriel fault zone. To the west, the Santa Barbara Channel separates the offshore islands from the mainland. Near the Santa Barbara Channel, the Ventura Basin is a transitional zone consisting of a coastal plain and shoreline. The coastal plain is composed of a broad alluvial plain, some of which forms estuaries and lagoons.

Based on the Ventura County Geologic Map for the Oxnard Quadrangle, the site is underlain by Holocene alluvial fan deposit composed predominantly of clay with interbeds of sand and occasional gravel (Clahan 2003).

3.6.1.1 Existing Conditions

Near-surface soils with the anticipated bearing zones of the proposed building areas are generally alluvial silty sands and sandy silts. Soils encountered were described by ESSC as having low blow counts and in-place densities, and having moderate compressibility. Testing indicated that anticipated bearing soils lie in the “very low” to “low” expansion ranges. ESSC included a locally adopted version of this classification of soil expansion in Appendix B of the ESSC Geotechnical Report. In their opinion, soils can be cut by normal grading equipment, although soils were observed to have relatively high moisture contents at shallow depths, and may require drying prior to use as structural fill.

Southern California is seismically active and the potential for significant ground shaking is universal throughout region. The Geotechnical Report prepared by ESSC evaluated the seismicity potential of the proposed project location with regards to potentially active and active faults per State of California guidelines to develop an estimate of maximum ground acceleration to determine risk for the proposed project. As with all studies of this kind, the Geotechnical Report cannot account for unknown faults in developing the estimate of peak ground acceleration, therefore the seismicity potential and peak acceleration determined in the report are based on the best information available at the time it was prepared and structural designers must be aware that there are inherent uncertainties in the determined values provided by ESSC.

The Geotechnical Report provided a chronology of historical earthquakes which have affected the project site and called out the following seismic events as notable for their regional impacts and specific effects on Ventura County: the 1812 Santa Barbara Channel and 1857 Fort Tejon events. These events directly impacted coastal Ventura County with strong ground motion. The 1812 event reportedly caused a measureable tsunami with a run up height of up to 15 feet. The actual height is in dispute among historians. Undisputed significant structural damage was reported at the Mission San Buenaventura from the 1857 event. ESSC used a proprietary software

utility to identify and list faults within a 60-kilometer radius of the proposed project (Appendix E). The list also includes the mean magnitude of earthquakes that could occur on the listed faults.

The effect of an earthquake on the Earth's surface is called the intensity. The Modified Mercalli Intensity Scale of ground shaking is used to discuss increasing levels earthquake intensity using observable effects that range from imperceptible shaking to catastrophic destruction. The intensity levels are designated by Roman numerals. The Modified Mercalli Intensity Scale does not have a mathematical basis; instead it is an arbitrary ranking based on observed effects, ranked from I to XII, with XII indicating the maximum possible intensity of ground movement and associated extreme levels of structural damage. The first level where most people notice ground motion is an intensity value of III. Structural damage begins to occur when the intensity exceeds a value of VI. Southern Ventura County has been mapped by the California Division of Mines and Geology to delineate areas of varying predicted seismic response. The Alluvium that underlies the subject area is mapped as having a probable maximum intensity of earthquake response of approximately IX on the Modified Mercalli Scale (ESSC 2017). Historically, the highest estimated intensity in the Oxnard area has been VII.

Using the estimated peak magnitude earthquake from the list of faults within 60 km of the proposed project site, ESSC applied USGS and proprietary modeling tools to develop a site-specific spectral response curve to estimate the acceleration from peak seismic ground motion compared to earth gravity (1g). The spectral response curve for the Maximum Considered Earthquake (MCE) was used to determine the spectral response parameters to assign a site-specific design category for mitigation measures.

3.6.1.2 Regulatory Setting

Federal Regulations and Policies

No federal regulations or policies relating to geology and soils are applicable to the proposed project.

State Regulations and Policies

Alquist-Priolo Earthquake Fault Zoning Act (1972)

The Alquist-Priolo Earthquake Fault Zoning (AP) Act (AP, Public Resources Code, Section 2621, et seq.) was passed into law following the destructive February 9, 1971 Mw 6.6 San Fernando earthquake. The AP Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the AP Act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The law requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. There are no Earthquake Fault Zones established at or in the near vicinity of the site, and procedures and regulations as recommended by the California Geological Survey (CGS) for investigations conducted in such zones do not specifically apply.

Seismic Hazard Mapping Act (SHMA) (1990)

Adopted by the state for the purpose of protecting public safety from the effects of earthquake hazards from non-surface fault rupture. The CGS prepares and provides local governments with seismic hazard zones maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The seismic hazards zones are referred to as "zones of required investigation" because site-specific geological investigations are required for construction projects located within these areas. Before a project can be permitted, a geologic investigation, evaluation, and written report must be prepared by a licensed geologist to demonstrate that proposed buildings will not be constructed across active faults. If an active fault is found, a structure for human occupancy must be set back from the fault (generally 50 ft). In addition, sellers (and their agents) of real property within a mapped Seismic Hazard Zone must disclose that the property lies within such a zone at the time of sale.

California Building Code (2016)

CCR Title 24, Part 2, the California Building Code (CBC) (CBSC 2016), provides minimum standards for building design in the State. Local codes are permitted to be more restrictive than Title 24, but not less restrictive. The procedures and limitations for the design of structures are based on-site characteristics, occupancy type, configuration, structural system height, and seismic zoning. Seismic ratings from the CBC divide the United States into four geographical zones. Most of central and coastal California, including the project site, is located in Seismic Zone 4. Construction activities are subject to occupational safety standards for excavation, shoring, and trenching as specified in California Occupational Safety and Health Administration (Cal/OSHA) regulations (CCR, Title 8).

California Health and Safety Code. Sections 17922 and 17951–17958.7 of the California Health and Safety Code

These rules require cities and counties to adopt and enforce the current edition of the CBC (CBSC 2016), including a grading section. The City and County have adopted and enforce these provisions. Sections of Volume 2 of the CBC specifically apply to select geologic hazards. Chapter 16 of the 2167 CBC addresses requirements for seismic safety. Chapter 18 regulates excavation, foundations, and retaining walls. Chapter 33 contains specific requirements pertaining to site demolition, excavation, and construction.

Unreinforced Masonry Law (1986)

In California, unreinforced masonry (URM) buildings are generally brick buildings constructed prior to 1933 and predating modern earthquake-resistant design. In earthquakes, the brick walls (especially parapets) tend to disconnect from the building and fall outward, creating a hazard for people below and sometimes causing the building to collapse. The URM Law requires cities and counties within Seismic Zone 4 to identify hazardous URM buildings and to consider local regulations to abate potentially dangerous buildings through retrofitting or demolition, as outlined in the State Office of Planning and Research Guidelines. No URM buildings are located on the project site.

Division of the State Architect

Prior to plan approval, the Division of the State Architect (DSA) ensures that structural design of schools complies with the current edition of the Uniform Building Code (UBC) applicable to structure design and construction in order to minimize the potentially damaging effect of severe ground shaking originating from earthquakes in the region.

The DSA also ensures that rough and final grading plans and over-excavation plans incorporate the recommendations of required final geotechnical investigation reports. Recommendations in the final geotechnical report are reflected in the notes on the grading plan and are implemented as conditions of building plan approval.

When a geologic hazard report is required for a project, the report must be submitted to the CGS before the project is submitted to the DSA. Final DSA approval will not occur until the DSA receives the final acceptance letter from CGS. It is the responsibility of the applicant to provide the CGS acceptance letter to the DSA and reference the DSA Application Number for the project.

School districts are responsible for the submittal of the geologic hazard report to the CGS and for the cost of review. Reports should be submitted to the CGS approximately two months prior to submittal of the project to the DSA.

Local Regulations and Policies

City of Oxnard Regulations. The OMC adopts the 2016 CBC (CBSC 2016) and has additional construction requirements in OMC Chapter 14, Building Regulations that has procedures and limitations for structural design based on seismic risk:

The following policies in the City of Oxnard 2030 General Plan are intended to reduce the potential for geological hazards to adversely affect people and property.

SH-1.3 Building Code Standards. Require that all new buildings and alterations to existing buildings be built according to the seismic requirements adopted within the most current City of Oxnard Building Code, or its adopted equivalent.

SH-1.4 Soil, Geologic, and Structural Evaluation Reports. Require that adequate soils, and geologic and structural evaluation reports be prepared by registered soils engineers, engineering geologists, and/or structural engineers, as appropriate, for applicable development.

SH-1.5 Required Geologic Reports. Continue to require the submission of a geological report for proposed development located in a potential liquefaction area.

SH-1.7 Soil Investigations. Continue to require a complete site-specific soils investigation that addresses liquefaction and compressible soil characteristics and identifies construction techniques or other mitigation measures to prevent significant impacts on the proposed development.

SH-1.8 Mitigating Seismic Hazards. Where necessary, utilize the expert mitigation measures such as those identified in Special Publication 117: Guidelines for Analyzing and Mitigating Seismic hazards in California (prepared by the Southern California Earthquake Center) to minimize risk associated with seismic activity.

3.6.2 Impact Analysis

3.6.2.1 Methodology

Earth Systems Southern California performed a comprehensive assessment of the impacts of the proposed project with respect to geologic and soil conditions (ESSC 2017). Their assessment included: a site reconnaissance, background literature review, site geologic mapping, drilling soil borings to sample soil and log conditions, laboratory tests on-site materials, an engineering analysis, and report preparation.

Soils and geologic and seismic hazards were then assessed based on the significance thresholds identified below.

3.6.2.2 Significance Thresholds

The thresholds for geology and soils impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines. The effects of the proposed project related to geology and soils are considered to be significant if the proposed project would:

- *Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.*
- *Expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.*
- *Result in substantial soil erosion or loss of topsoil.*
- *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.*
- *Be located on expansive soil, as defined by Table 18-1-B of the UBC (1994), creating substantial risks to life or property.*

3.6.2.3 Project Impacts

Would the project expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The probable maximum intensity of a seismic event which could affect would be approximately intensity IX on the Modified Mercalli Scale (ESSC 2017). At this level of shaking it is likely that there will considerable damage in specially designed structures; some well-designed frame structures could be thrown out of plumb; and great damage could occur in substantial buildings, with partial collapse possible. This intensity could also result in buildings being shifted off foundations. In addition, there would be great damage to poorly built structures and chimneys, factory stacks, columns, monuments, and free-standing walls would be at great risk of falling beginning at the lesser Intensity Level VIII. The Geotechnical Report Site-Specific Analysis for ground motion calculated estimates of motion for a maximum considered earthquake with a moment magnitude of 7.2 on Oak Ridge fault, which occurs within 2.8-miles of the project site. The Short Period Spectral Response (Sips) was found to be 1.198 g, and the 1 Second Spectral Response (SD1) was found to be 1.312 g. Both the “site-specific” and “general” procedure yielded peak ground accelerations of 0.873 g. Therefore, the findings of the Geotechnical Report show that there is the potential for adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.

The potential risks posed by the project from strong seismic ground shaking would be less than significant impacts with mitigation incorporated. Mitigation Measure GEO-1 requires that the building design for structures at the Project use geotechnical building design recommendations that are based on a site-specific ground motion hazard analysis for the Project site in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site-specific ground motion hazard analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-1, the project would have a less than significant impact.

Would the project expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The geotechnical testing performed by ESSC determined that the potential effects of liquefaction, including potential differential settlements could occur at the proposed project site, where up to about 2.0 inches settling could occur, and up to about 1.3 feet of potential lateral spreading could occur. Therefore, there is a potential risk of loss, injury or death involving seismic-related ground failure, including liquefaction.

The potential risks posed by the project from seismic-related ground failure, including liquefaction would be less than significant impacts with mitigation incorporated. Mitigation Measure GEO-2 requires that the building design for structures at the Project use geotechnical building design recommendations that are based on a site-specific evaluation of the liquefaction potential performed in accordance with the 2016 CBC (CBSC 2016) and the methods in the 2017 ESSE Geotechnical Report (ESSC 2017). The site-specific liquefaction potential analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-2, the project would have a less than significant impact.

Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Earth Systems Southern California determined that there is no risk from off-site landslide, but liquefaction and differential settlements, ranging up to about 2.0 inches, and potential lateral spreading could occur, up to about 1.3 feet. Therefore, there is a potential that the project would expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure.

The potential risks posed by the project from a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be less than significant impacts with mitigation incorporated. If Mitigation Measure

GEO-2 is implemented, it would reduce the potential risks posed by liquefaction, differential settlements, and lateral spreading to a less than significant impact.

Would the project result in substantial soil erosion or loss of topsoil?

Soil erosion would potentially occur during construction activities, including site grading, structure assembly, and utility extension. With the implementation of Mitigation Measure GEO-3, this impact would be reduced to a less than significant level with standard erosion mitigation measures, including the use of hay bales and other erosion control devices as determined by site-specific conditions, limiting construction to the dry season, soil wetting, and adherence to applicable regulatory guidelines and standards. These measures would also reduce potential air quality impacts and sedimentation.

Once the project is completed, no additional loss of topsoil or erosion would occur as there would be no exposed soils on the project site.

Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Soil testing documented the ESSC Geotechnical Report (ESSC 2017) indicated that shallow subsurface soils (at depths of 0 to 5 feet bgs) are in the low expansion range (have a UBC Expansion Index [EI] between 21 and 50). Section 10803.2 of the 1994 UBC mandates that “special [foundation] design consideration” be employed if the EI is greater than 20 (UBC Table 18-1-B).

The potential risks posed by the project from expansive soils would be less than significant impacts with mitigation incorporated. Mitigation Measure GEO-4 requires that special foundation design procedures in the building design for structures at the Project use the geotechnical building foundation design recommendations in the 2017 ESSE Geotechnical Report (ESSC 2017) that are based on a site-specific evaluation of the expansive soils potential. The site-specific expansive soil analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA. With the implementation of Mitigation Measure GEO-4, the project would have a less than significant impact.

3.6.2.4 Cumulative Impacts

The proposed project would result in a less than significant contribution to cumulative impacts on soils and geology. The proposed project and all new building projects within the surrounding study area (City and the County) would be required to comply with the applicable State and local requirements, including, but not limited to, the CBC, and would be required to implement recommendations of a site-specific geotechnical report. Therefore, the project specific impacts, as well as the impacts associated with other projects, would be reduced to a less than significant level. Seismic impacts are a regional issue and are also addressed through compliance with applicable codes and design standards. For these reasons, the project’s contribution to cumulative geotechnical and soil impacts is less than significant.

3.6.2.5 Mitigation Measures

GEO-1: The building design for structures at the Project shall use geotechnical building design recommendations that are based on a site-specific ground motion hazard analysis for the Project site performed in accordance with ASCE 7-10 (ASCE 2013) Chapter 21 as modified by Section 1803A.6 of the 2016 CBC (CBSC 2016). The site-specific ground motion hazard analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.

GEO-2: The building design for structures at the Project shall use geotechnical building design recommendations that are based on a site-specific evaluation of the liquefaction potential performed in accordance with the 2013 CBC (CBSC 2016) and the methods in the Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A (CGS 2008). The site-specific liquefaction potential analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.

GEO-3: Potential soil erosion that would occur during construction activities, including site grading, structure assembly, and utility extension shall be reduced to a less than significant level with standard erosion mitigation measures, including the use of hay bales and other erosion control devices as determined by site-specific conditions, limiting construction to the dry season, and soil wetting, applied as required under applicable regulatory guidelines and standards.

GEO-4: Special foundation design procedures in the building design for structures at the Project use the geotechnical building foundation design recommendations in the 2017 ESSE Geotechnical Report (ESSC 2017) that are based on a site-specific evaluation of the expansive soils potential. The site-specific expansive soil analysis and geotechnical building design recommendations shall be approved by the CGS and the DSA.

3.6.2.6 Level of Impact After Mitigation

Implementation of, and compliance with, the mitigation measures identified above would reduce all potentially significant impacts related to soils and geology to a less than significant level.

3.7 GREENHOUSE GAS EMISSIONS

Climate change refers to any significant change in measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which, in turn, heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities.

3.7.1 Environmental Setting

3.7.1.1 Existing Conditions

The United States Environmental Protection Agency (U.S. EPA) in its website states that climate change will have different effects in different parts of the world. In the U.S. each state will be impacted differently by climate change. One common symptom that all states in the U.S will experience is rising temperatures. Some states will experience an increase in rainfall intensity, creating flooding problems while other states will be affected by severe droughts, impacting agriculture and drinking water supplies (U.S. EPA 2017).

Based on the 2017 update of the California GHG inventory for 2000 to 2015 prepared by the CARB, California emitted 440.36 MMTCO_{2e} in 2015 (CARB 2017). According to CARB, the potential impacts in California due to global climate change may include loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines; sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation. Various measures at the federal and state levels are currently in effect to reduce GHG emissions in an effort to mitigate climate change effects resulting from anthropogenic activity.

3.7.1.2 Regulatory Setting

Federal

The U.S. EPA is the agency responsible for writing and implementing federal regulation for the protection of the environment, including regulation for GHG emissions. To this end, the U.S. EPA pursues a number of efforts including collection of data, pursuing emissions reductions by promoting clean energy economy and partnering with states, localities, and tribes. The U.S. EPA delegates its authority to ten executive offices in the United States each of which is responsible for the execution the U.S. EPA programs within several states and territories. California is within the jurisdiction of Region 9.

The U.S. EPA has instituted various regulation measures to reduce GHGs. One of these efforts is under 40 CFR, Part 98 that require mandatory reporting of GHG emissions (i.e., CO₂, CH₄, N₂O, sulfur hexafluoride, hydrofluorocarbons, and other fluorinated gases) for certain industrial operations. Most of these industrial operations include electricity generation facilities, oil refineries, and manufacturing operations. Mandatory reporting is also required for combustion sources, such as boilers and stationary engines, which emit more than 25,000 metric tons (MT) of CO₂-equivalents (MTCO_{2e}) per year.

State

California pursuit of GHG emission reductions has been addressed through Senate Bill (SB) 32, Assembly Bill (AB) 197, AB 32, Executive Order B-16-2012, AB 32, Executive Order S-3-05, and CCR sections 95100-95157.

On September 8, 2016, Governor Edmund G. Brown signed SB 32 and AB 197, which require the state of California to cut emissions by 30% below 1990 levels by 2030.

In March 2012, Executive Order B-16-2012 was issued to support the reduction of GHGs through zero-emission vehicles as measure to pursue achievement of California target for 2050 to reduce GHG emissions from the transportation sector equaling 80% less than 1990 levels.

On September 27, 2006, Governor Arnold Schwarzenegger signed into law AB 32, California Global Warming Solutions Act of 2006, which requires the Air Resources Board (ARB) to develop and implement regulations and initiatives to reduce GHG emissions to 1990 levels, or lower, by 2020. The ARB established the 1990 target at 427 MMT CO_{2e}. Pursuant to AB 32, the ARB has also adopted a number of regulations, which are outlined in the initial Scoping Plan, which the ARB adopted in 2008 to prescribe actions aimed at reducing California's GHG emissions. Under AB 32, the ARB has primary responsibility for promulgating regulations, programs, and enforcement mechanisms to achieve the GHG reduction target.

The law requires the ARB to establish a program geared toward tracking and reporting GHG emissions; approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions from sources of GHG emissions; adopt early reduction measures to begin moving forward; and adopt, implement, and enforce regulations—including market mechanisms such as “cap-and-trade” programs—to ensure the required reductions occur. The ARB recently adopted a statewide GHG emissions limit and an emissions inventory, along with requirements to measure, track, and report GHG emissions by the industries it determined to be significant sources of GHG emissions.

AB 32 requires ARB to update the Scoping Plan every five years. The most recent update to the Scoping Plan Update was approved by the ARB in May 2014. It identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. These efforts put California on course to achieve the near-term 2020 goal, and have created a framework for ongoing climate action that can be built upon to maintain and continue economic sector-specific reductions beyond 2020, as required by AB 32. In this Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the Cap-and-Trade Program.

In June 2005, Executive Order S-3-05 was issued to set GHG goals. Under S-3-05 a more aggressive goal than the one prescribed in AB-32 for achieving a reduction in was established. Executive Order S-3-05 prescribes a goal to reduce GHG emissions by 80% below 1990 levels by 2050 (California ARB 2014a). On March 2012, Executive Order B-16-2012 was issued to support the reduction of GHGs through zero-emission vehicles as measure to pursue achievement of California target for 2050 to reduce GHG emissions from the transportation sector equaling 80% less than 1990 levels.

On December 2007, California adopted regulation for the mandatory reporting of GHG emissions (mandatory reporting regulation [MRR]) under CCR Sections 95100-95157 to comply with requirements promulgated by the U.S. EPA in 40 CFR, Part 98. The MRR sets emissions reporting thresholds of 10,000 MTCO_{2e}. Thus, any project or facility with the potential to emit equal to or greater than 10,000 MTCO_{2e} from combustion and process emissions would be subject to the MRR reporting requirements.

Regulated GHGs under California Health and Safety Code 38505 include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). GHGs are commonly quantified in the equivalent mass of CO₂, denoted CO_{2e}, which takes into account the global warming potential (GWP) of each individual GHG compound. The most common GHG that results from human activity is CO₂, followed by CH₄ and N₂O.

Summary of GHGs

The following narratives provide a brief summary of GHGs.

Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle.

Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Hydrofluorocarbons, PFCs, SF₆ and NF₃ are synthetic, powerful GHGs that are emitted from a variety of industrial processes. HFCs and PFCs are sometimes used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as High Global Warming Potential gases. SF₆ is employed in electricity transmission and distribution and semiconductor manufacturing. NF₃ results from semiconductor manufacturing processes (CARB 2017b).

Local

The City of Oxnard 2030 General Plan provides various goals and policies related to GHG and global warming. Some of the policies applicable directly and indirectly to the proposed project are listed in Table 3-17.

Table 3-17. City of Oxnard Goals and Policies Applicable to the Proposed Project

Goals/ Policies No.	Title	Description
SC-3.9	Promote Voluntary Incentive Programs	Promote voluntary participation in incentive programs to increase the use of solar photovoltaic systems in new and existing residential, commercial, institutional and public buildings, including continued participation in the Ventura County Regional Energy Alliance (VCREA).
SC-3.12	Encourage Natural Ventilation	Review and revise applicable planning and building policies and regulations to promote use of natural ventilation in new construction and major additions or remodeling consistent with Oxnard’s temperate climate.
SC-4.1	Green Building Code Implementation	Implement the 2010 California Green Building Code as may be amended (CALGREEN) and consider recommending and/or requiring certain developments to incorporate Tier I and Tier II voluntary standards under certain conditions to be developed by the Development Services Director.
ICS-2.6	Reduction of Construction Impacts	Minimize and monitor traffic and parking issues associated with construction activities, require additional traffic lanes and/or other traffic improvements for ingress and egress for new developments for traffic and safety reason, where appropriate.
ICS-3.3	New Development Level of Service C	Determine as part of the development review and approval process that intersections associated with new development operate at a level of service of “C” or better.

Table 3-17 (Continued). City of Oxnard Goals and Policies Applicable to the Proposed Project

Goals/ Policies No.	Title	Description
ICS-8.8	Educational Facilities	Coordinate with public school districts and other educational facilities to design pedestrian and bicycle access as the preferred access to schools rather than vehicular, and improve drop off and pick up circulation, especially during the morning and afternoon peak periods.
ICS-11.7	Water Wise Landscapes	Promote water conservation in landscaping for public facilities and streetscapes, residential, commercial and industrial facilities and require new developments to incorporate water conserving fixtures (low water usage) and water-efficient plants into new and replacement landscaping.
ICS-11.12	Water for Irrigation	Require the use of non-potable water supplies for irrigation of landscape whenever available.

Source: City of Oxnard 2011

3.7.2 Impact Analysis

3.7.2.1 Methodology

Pursuant to state law (CEQA Guidelines 15064.7) Ventura County Air Pollution Control District (VCAPCD) is authorized to adopt thresholds of significance for GHG emissions. To date, VCAPCD has evaluated multiple options, but has not made a decision to adopt any of these options. VCAPCD is leaning toward the adoption of thresholds of significance for land use development consistent with those adopted by the South Coast Air Quality Management District (SCAQMD). On December 5, 2008, SCAQMD Governing Board adopted a proposal for an interim GHG threshold of significance for projects where the SCAQMD is lead agency. The threshold of significance is applicable for stationary sources and can be used for determining significant impacts for proposed projects (SCAQMD 2008). Under the interim thresholds of significance, projects can emit up to 10,000 MT per year of CO₂e before being deemed as having significant impacts. GHGs resulting from the Proposed Project were calculated using CalEEMod and compared to the SCAQMD threshold of 10,000 MT per year of CO₂e.

3.7.2.2 Significance Thresholds

3.7.2.3 Project Impacts

The following criteria for GHG is consistent with Appendix G of the CEQA Guidelines. The proposed project would result in a significant impact if it would:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*
- *Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?*

An affirmative answer to any of the questions above represents a significant impact on the environment associated with the proposed project.

Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The proposed project would generate GHGs during construction and operation activities. Detailed GHG calculation input data and results are presented in Appendix C. A summary of GHG emissions from construction and operation activities of the proposed project including, significance with respect to the SCAQMD threshold of 10,000 MT of CO₂e is presented in Table 3-18.

Table 3-18. Annual Greenhouse Gas Emissions

Phase	CO ₂ e (MT)
Construction 2019	513
Construction 2020	148
Operation	2,560
Threshold	10,000
Significant?	No

As identified in Table 3-18, GHG emissions generated by the proposed project would not exceed the identified threshold and therefore project impacts are considered less than significant.

Would the project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

As noted above, GHG emissions generated by the proposed project would not exceed the SCAQMD threshold of 10,000 MT of CO₂e. Neither, construction nor operation of the proposed project is expected to conflict with any applicable plan, policy or regulation of any agency adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, project impacts are considered less than significant.

3.7.2.4 Cumulative Impacts

The proposed project would contribute GHGs which would add to GHG emitted locally and globally. However, the GHG emissions from the proposed project would not exceed the SCAQMD interim threshold of 10,000 MT per year of CO₂e and therefore cumulative project impacts are considered less than significant.

3.7.2.5 Mitigation Measures

No mitigation measures are required for the reduction of GHG emissions associated with the proposed project.

3.7.2.6 Level of Impact After Mitigation

No mitigation measures are required, project impact is considered less than significant.

3.8 HAZARDS AND HAZARDOUS MATERIALS

This section discloses potential hazards and hazardous material impacts that may result from implementation of the proposed project. Technical studies that were reviewed and utilized in the analysis are identified below and included in the appendices to this document.

- *Soil Management Plan, Elementary and Middle Schools, Southeast Corner of Doris Avenue and North Patterson Road, Oxnard California* (ATC Group Services [ATC] 2017b) (Appendix F)
- *Preliminary Endangerment Assessment Report, Proposed Elementary and Middle Schools, Southeast Corner of Doris Avenue and North Patterson Road, Oxnard California 93030* (ATC 2017a) (Appendix F);
- *Phase I Environmental Site Assessment Doris Patterson New Academy Site Acquisition, Oxnard School District, Oxnard California* (Ninyo & Moore 2015) (Appendix G);
- *Pipeline Risk Analysis, Oxnard School District, Doris Avenue/Patterson Road Educational Facilities, Oxnard, California* (J House Environmental, Inc. [JHE] 2017) (Appendix H); and
- *Aircraft Hazard and Land Use Risk Assessment for Doris Avenue/Patterson Road Educational Facilities Project, Oxnard California* (Heliplanners, Inc. [Heliplanners] 2017) (Appendix I).

As noted in the Initial Study (Appendix A), the proposed project would not: create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; be located within the vicinity of a private airstrip; impair implementation of or physically interfere with an adopted emergency response plan; or result in significant wildland fire risk.

3.8.1 Environmental Setting

3.8.1.1 Existing Conditions

The project site is currently agricultural land that has been farmed since at least 1938. A Preliminary Endangerment Assessment (PEA) was performed under regulatory oversight from the California Department of Toxic Substances Control (DTSC). The PEA identified two potential sources for environmental hazards for the proposed project; pesticides in soil from historical and current agricultural use; and the potential for soil gas impacts from an oil field and from high pressure natural gas pipelines near the proposed project site. The Phase I Environmental Site Assessment (ESA) identified high pressure natural gas and water pipelines and the proximity to an airport as potential hazards.

Pesticides in Soil

The PEA evaluated the project site for pesticides and herbicides in surface soils (ATC 2017a). Thirty-six soil borings were drilled in a grid pattern evenly distributed across the project site and surface soil samples were collected at 0 to 0.5-foot bgs and 36 shallow subsurface soil samples were collected at 2.0 to 2.5 feet bgs. The 36 surface soil samples were combined into nine composite samples and analyzed for organochlorine pesticides (OCPs). Nine discrete soil samples were analyzed for arsenic. The 36 subsurface soil samples were held by the laboratory pending review of the surface soil OCP analysis results. The soil samples results were compared to U.S. EPA Regional Screening Levels (RSLs) for residential soil to evaluate their potential toxicity. The OCP Toxaphene was detected at concentrations above the RSL for residential soil of 490 micrograms per kilogram ($\mu\text{g}/\text{kg}$) in all nine composite surface soil samples at a maximum concentration of 2,510 $\mu\text{g}/\text{kg}$. Due to the detection of Toxaphene at concentrations exceeding the RSLs in all the surface composite soil samples, the 36 subsurface soil samples were combined into nine composite samples and analyzed for OCPs. Toxaphene was detected eight of the nine subsurface composite soil samples with concentrations above the RSL in four samples and at concentrations less than the RSL in four others. Arsenic was detected at concentrations between 3.01 and 3.76 milligrams per kilogram (mg/kg), which is less than the DTSC screening level for arsenic at school sites of 12 mg/kg . The concentrations of arsenic detected in soil were therefore determined to be consistent with background concentrations.

Soil Gas Evaluation

A soil vapor survey was performed at the Site following applicable DTSC and Regional Water Quality Control Board (RWQCB) protocols for the PEA (ATC 2017a). Soil vapor samples were collected from ten direct-push boring locations at 5 and 10 feet bgs and analyzed in an on-site laboratory for methane and hydrogen sulfide using a handheld instrument. Methane was detected in four soil vapor samples collected 5 feet bgs at concentrations ranging from 10.28 parts per million by volume (ppmv) in the center of the site to 15.26 ppmv near the northeastern corner of the site. Methane was detected at 15.22 ppmv in one sample collected in the central western site at 15 feet bgs. The maximum concentration of methane detected, 15.26 ppmv, is equivalent to approximately 0.03% of the Lower Explosive Limit (LEL), and is not considered to be a hazard to the site. No hydrogen sulfide was detected in soil gas at the site.

Aircraft Hazard and Land Use Risk Assessment (AHLRA)

The Phase I ESA indicated that the proposed project is located within 0.3 mile of a public airport (Ninyo & Moore 2014). The project is within the Oxnard Airport SOI and Oxnard zoning ordinance 2132, Part 6, Section 36-5.13.0 (Airport Hazard Overlay Zone) subject projects within the SOI to an assessment of potential risk from aviation activities. Heliplanners performed an AHLRA for the project site in October 2017 to analyze the potential aircraft hazards and land use risks for the proposed project from the Oxnard Airport (Heliplanners 2017).

The airport has one runway, designated Runway 7 on the west and Runway 25 on the east, indicating magnetic bearings of approximately 070 and 250 degrees, respectively. The paved area is 5,953 feet long and 100 feet wide. The proposed project is located approximately 1,800 feet north of Runway 7/25, within the Oxnard Airport SOI boundary. The Oxnard Airport SOI, which encompasses the project site, is an area designated “for the coordination and review of land use proposals which may affect or be affected by the operations at Oxnard Airport”, according to the City of Oxnard General Plan.

Runways 7 and 25 are equipped with both “precision” and “non-precision” instrument landing systems (ILS) to aid in pilots in various weather conditions. The ILS provides “precision” vertical and horizontal guidance for approach from the east for Runway 25, but only provides “non-precision” horizontal guidance for Runway 7 when approaching from the west. The primary approach and take-off direction is to the west on Runway 25 due to the prevailing onshore wind direction. These conditions account for most take-off and landing traffic, with about 7% of remaining traffic taking off or landing on Runway 7 when calm or easterly wind conditions prevail. Historical operations counts (take-off or landing operations), including general aviation, commuter, air taxi, and military traffic were tabulated in the AHLRA for 1990 to 2016. The data shows that there has been a steady decline in airport traffic from 1990 to 2012 (152,236 to 54,611 operations, respectively). Although there has been an increase in operations during the last three years of record; the number operations in 2016 (74,151) were less than half of the activity reported in 1990.

The AHLRA compiled a list of aircraft accidents in the Oxnard Airport SOI to evaluate accident risks (Heliplanners 2017). There have been six significant accidents involving approaches or departures of aircraft inside the Oxnard Airport SOI and three outside the SOI, but nearby, since 1979.

High Pressure Natural Gas and High Volume Water Pipelines

There is a 10-inch high pressure natural gas pipeline operated by the Southern California Gas Company (SCGC) approximately 1,000 feet south of the proposed project along the south shoulder of Teal Club Road, approximately parallel to the roadway (Ninyo & Moore 2014; Tetra Tech 2017). A high volume municipal water main (12-inch diameter and greater) operated by the City of Oxnard was also identified in the right-of-way beneath Doris Avenue (Tetra Tech 2017).

3.8.1.2 Regulatory Setting

The EPA defines a hazardous waste as a substance that (1) may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; and (2) poses a substantial

present or potential future hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous waste is also defined as ignitable, corrosive, explosive, or reactive (Code of Federal Regulations [CFR] Title 40: Protection of the Environment, Part 261) (LSA Associates, Inc. (LSA) 2013).

A material may also be classified as a hazardous material if it contains defined amounts of toxic chemicals. The EPA has developed a list of specific hazardous wastes that are in the forms of solids, semisolids, liquids, and gases. Producers of such wastes include private businesses and federal, State, and local government agencies. The EPA regulates the production and distribution of commercial and industrial chemicals to protect human health and the environment. The EPA also prepares and distributes information to further the public's knowledge about these chemicals and their effects and provides guidance to manufacturers in pollution prevention measures, such as more efficient manufacturing processes and recycling used materials (LSA 2013).

Federal Regulations and Policies

Hazardous Materials Regulations (CFR Titles 10, 29, 40, and 49)

The EPA, the Occupational Safety and Health Administration (OSHA), and the United States Department of Transportation (DOT) regulate hazardous materials. Federal regulations for hazardous materials are primarily found in CFR Titles 10, 29, 40, and 49. In particular, CFR Title 40 Part 261 governs the identification and listing of hazardous wastes, their storage, and disposal.

Federal laws include the following major statutes (and regulations issuing from them):

- **Resources Conservation and Recovery Act (RCRA)**, Hazardous waste management;
- **Hazardous and Solid Waste Amendments Act (HSWA)**, Hazardous waste management;
- **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, Cleanup of contamination and funding for responses;
- **Superfund Amendments and Reauthorization Act (SARA)**, Cleanup of contamination; and
- **Emergency Planning and Community Right-to-Know (SARA Title III / EPCRA)**, Business inventories, emergency response planning, and notification.

The EPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to State and local environmental regulatory agencies (LSA 2013).

Federal OSHA (29 USC 651 et seq.)

OSHA established requirements for workers involved in the handling, use, and disposal of hazardous materials, including emergency response, hazard communication, and personal protective equipment. The law also requires manufacturers to prepare safety data sheets (SDSs) which describe the proper use of hazardous materials) and provide SDSs to shippers, product end users, and workers (LSA 2013).

Hazardous Waste Operations Emergency Response (HAZWOPER)

OSHA requires special training under 29 CFR 1910.120 for workers who handle hazardous materials, and requires notification to employees who work in the vicinity of hazardous materials. HAZWOPER also requires employers to train personnel to respond to accidental releases of hazardous materials.

OSHA also regulates lead and asbestos exposure as it relates to worker safety (LSA 2013).

Federal Aviation Regulations (FAR) Title 14 Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

The FAA uses these standards for determining whether objects may obstruct safe air navigation. Part 77 defines a number of "imaginary surfaces" extending from the runway that are utilized by the FAA to gage potential flight hazards prior to construction of project near airfields. The "horizontal surface" is established at 150 feet above the elevation level of the airport (for Oxnard Airport this elevation is 45 feet amsl, while "transitional surfaces" extend

up and away from the primary approach surface edges and rise at a 7:1 slope until reaching the horizontal surface at 195 mean sea level (MSL). Any proposed structures that breach these surfaces are subject to review by the FAA. The FAA would issue a determination of a hazard to air navigation if they find a safety problem (LSA 2013).

State Regulations and Policies

State agencies have been delegated by federal law to implement federal hazardous materials and hazardous waste regulations under RCRA. Where state regulations are more restrictive, hazardous wastes are regulated under the California HSC (LSA 2013).

The DTSC and the Regional Water Quality Control Boards (RWQCBs) have been assigned jurisdiction over hazardous chemical materials management by the State Legislature. DTSC administers the State's hazardous waste program and implements the federal (RCRA) program in California. The nine RWQCBs in the State issue and enforce National Pollutant Discharge Elimination System (NPDES) permits and regulate LUSTs and other sources of groundwater contamination. Other State agencies involved in hazardous materials management are the Department of Industrial Relations (State OSHA implementation), Office of Emergency Services (OES—California Accidental Release Prevention implementation), California Department of Fish and Wildlife (CDFW), California Air Resources Board (ARB), Caltrans, State Office of Environmental Health Hazard Assessment (OEHHA) (Proposition 65 implementation), the Department of Resources Recycling and Recovery (CalRecycle) (operation of landfills and waste handling/disposal facilities), and the State of California Division of Oil, Gas, and Geothermal Resources (DOGGR). The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and Caltrans (LSA 2013).

Government Code Section 65962.5

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites (LSA 2013).

California Code of Regulations and California Health and Safety Code

The CCR and the California HSC incorporate the requirements of the federal RCRA Subtitle I and set registration and permitting requirements, construction/operational standards, closure requirements, licensing of UST contractors, financial responsibility requirements, release reporting/corrective action requirements, and enforcement. Additionally, these provisions regulate the abatement process in the event of contamination of hazardous wastes. Specifically, the California HSC establishes standards, regulations, and requirements for the installation, inspection, registration, maintenance, and abandonment of USTs (LSA 2013).

Emergency Planning and Community Right-to-Know (Proposition 65)

These regulations require worker notification of hazardous substances in the workplace. Parts of Title 8 of CCR Sections 1532.1 and 1529 provide for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to lead and asbestos as well as regulate abatement and disposal of these materials.

Oil and Gas Resources Regulations (Title 14, Chapter 4)

This chapter of the CCR establishes requirements for the development, regulation, and conservation of oil and gas resources. Specifically, Section 1723, et seq. establishes well abandonment rules for oil and gas wells and Section 1981 lays out standards for modifying existing wells and expands standards for plugging abandoned wells. The California DOGGR supervises the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells to ensure compliance with Title 14 and other regulatory requirements for oil and gas development (LSA 2013).

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (27 CCR Division 1, Subdivision 4, Chapter 1, Sections 15100–15620)

Created by State legislation in 1993 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities, the Unified Program legislation empowered Cal-EPA to grant qualifying local agencies oversight and permitting responsibility for the following emergency and management programs:

- Hazardous materials release response plans and inventories (business plans);
- California Accidental Release Prevention Program (CalARP);
- Underground Storage Tank (UST) Program;
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control and Countermeasure Plans;
- Hazardous Waste Generator and On-site Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: hazardous material management plans and hazardous material inventory statements.

The proposed project is located in an unincorporated area of Ventura County that is proposed for annexation to the City of Oxnard. The Ventura County Certified Unified Program Agency (CUPA) provides oversight for these programs in Ventura County and the Oxnard Fire Department administers these programs in the City (LSA 2013).

CEQA Public Resources Code (PRC) Section 21151.8 (School Sites and Hazardous Materials); CEQA Guidelines, Section 15186 (School Facilities)

Prohibits lead agencies from approving environmental documents for any project involving the purchase of a school site or the construction of a new school where public funds are used. Purchase or development with public funds is specifically prohibited the following school development sites:

- Current or former hazardous wastes sites;
- Sites that contain hazardous materials pipelines (above or below ground); or
- Or have facilities located within 0.25-mile of the proposed school site that may reasonably be anticipated to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste.

For proposed school sites within 0.25-mile of potential emitters or handlers of hazardous or acutely hazardous material/substance/wastes the lead agency must find that there is not an actual risk, or that the risks have been mitigated to a level that there is not actual or potential endangerment of public health. The DTSC, as the assigned lead agency for California school development projects using public funds, uses a well-defined process to evaluate risks and approve school sites for purchase or development that includes preparation of Phase I ESAs and PEAs to identify and evaluate actual risk.

Education Code, Sections 17213.1, 17213.2, and 17268

These statutes require extensive DTSC involvement in the environmental review process for projects that will receive State funding. Prior to acquiring a school site or approving a school construction project, school districts must complete a number of environmental review steps that may include the following documents:

- **Phase I ESA:** The Phase I ESA must contain sufficient information to determine whether there is a potential for exposure to hazardous materials and must conclude that either (1) a further investigation of the site is not required, or (2) further investigation is necessary.
- **PEA:** If a school district chooses to proceed with a PEA, it must enter into an Environmental Oversight Agreement with DTSC to oversee preparation of the PEA. DTSC must then assist the district with scoping the work plan for the PEA investigation. Sampling could include soil gas, soil matrix, groundwater, and other sampling and calculation of cancer risks and non-cancer risks. Based on information developed during the PEA and a conservative human and ecological risk evaluation, the DTSC would then make a decision regarding potential risks posed by the site. Possible outcomes of the DTSC's decision include the following:

- The process continues through a **Remedial Investigation/Feasibility Study** process if the site is found to be significantly impacted by hazardous materials, and the school district elects to continue to pursue site development;
 - **Removal Action:** if localized hazardous impacts are found that can eliminate or mitigate conditions through excavation; and
 - Issuance of a “No Further Action” finding if the site is found not to be significantly impacted and risks to human health and the environment are found to be within acceptable levels based on the conservative screening level human health risk assessment. Any human health risk assessment must be quantitative for both residential and school-based receptors. The effort entails data aggregation, selection of chemicals of potential concern, exposure assessment, toxicity assessment, and risk characterization.
- **Removal Action:** A school district can choose to enter into a Voluntary Cleanup Agreement (VCA) with DTSC if the district elects to perform a removal action to prepare the site for use as a school site where the presence of contaminants have been confirmed through a PEA that exceed human health risk assessment guidelines for protectiveness for school-based receptors.

Before a site’s school buildings can be occupied, DTSC must certify that all response actions that are necessary to ensure that hazardous materials at the school site no longer pose a significant risk to children and adults, except for operation and maintenance activities, have been completed (LSA 2013).

Education Code, Section 17215

Before acquiring title to property for a new school site, the school district governing board is required to notify the California Department of Education (CDE) of the proposed acquisition, if the proposed site is within 2 miles of an airport runway or a potential runway is included in an airport master plan that is nearest to the site. CDE must then notify the Department of Transportation (DOT), which in turn would investigate the proposed site and submit a written report of its findings, including recommendations concerning acquisition of the site. As part of the investigation, the owner and operator of the airport would be granted the opportunity to comment upon the proposed school site. If the written report does not favor the acquisition of the property for a school site, State funds or local funds cannot be used for acquisition of, or school construction at, the subject site (LSA 2013).

Education Code, Section 17251; CDE Regulations, 5 CCR Section 14010 (Standards for School Site Selection)

Section 17251 requires CDE to establish standards for use by school districts in assessing school sites. The CDE regulations adopted pursuant to Section 17251 contain the following standards for school sites, among others:

- The site shall not be adjacent to a road or freeway that any site-related traffic studies have determined will have safety problems (5 CCR Section 14010[e]).
- The site shall not be located near an aboveground water or fuel storage tank or within 1,500 feet of the easement of an aboveground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission (5 CCR Section 14010[h]).
- If the proposed site is on or within 2,000 feet of a significant disposal of hazardous waste, the school district shall contact the DTSC for a determination of whether the property should be considered a Hazardous Waste Property or Border Zone Property (5 CCR Section 14010[t]).

There are several additional elements listed under these sections of the Education Code, CDE Regulations, and CCR that were evaluated in the IS and were not carried forward to the EIR (LSA 2013).

CDE School Facilities Planning Division, School Site Selection, and Approval Guide (CDE 2001)

The site selection guide outlines the requirements of the CDE regulations for site selection that are described above and includes recommendations that are designed to ensure a safe school environment and facilitate State

approval of sites. The guide helps school districts determine compliance with the requirements of CDE Regulations Section 14010 et seq. and Education Code Section 17213 et seq. (LSA 2013).

Local Policies and Regulations

Within the City of Oxnard, Oxnard Fire Department has jurisdictional responsibility as the CUPA.

3.8.2 Impact Analysis

3.8.2.1 Methodology

The CDE has several requirements for analyzing new school sites related to hazards and hazardous materials (Section 3.8.1.2).

The hazards and hazardous waste issues carried forward from the Initial Study include the following:

- Aboveground and underground storage tanks or pipelines;
- Proximity to known hazardous waste sites; and
- Proximity to airports.

These hazards and hazardous materials issues were analyzed in the reports cited in the introduction to Section 3.8. The reports included site reconnaissance, soil sampling historical research, risk assessment, and findings and recommendations. The information in these reports has been used to assess hazards and hazardous materials impacts as they pertain to CEQA compliance.

3.8.2.2 Significance Thresholds

The thresholds for Hazards and Hazardous Materials used in this analysis are consistent with Appendix G of the State CEQA Guidelines. The effects of the proposed project related to Hazards and Hazardous Materials are considered to be significant if the proposed project would:

- *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.*
- *Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.*
- *Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.*
- *Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area.*

3.8.2.3 Project Impacts

Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The proposed project would not create a significant hazard to the public or the environment involving the likely release of hazardous materials. The proposed project would not handle or generate large quantities of hazardous materials. Potential hazardous materials used on-site include those needed during short-term temporary construction activities such as architectural coatings and sealants. During long-term operations, small quantities of potential hazardous materials stored at the school would include cleaners (e.g., disinfectants, bleach) and office supplies (e.g., toner). As is standard for schools, these materials would be kept in cabinets or supply rooms and therefore, would not be considered a hazard to students, staff, or the public.

The project site is located within 1,500 feet of a high pressure natural gas pipeline and a high volume water pipeline. There is a 10-inch high pressure natural gas pipeline operated by the Southern California Gas Company approximately 1,000 feet south of the proposed project along the south shoulder of Teal Club Road, approximately parallel to the roadway (Ninyo & Moore 2014; Tetra Tech 2017). A high volume municipal water main (12-inch diameter and greater) operated by the City of Oxnard was also identified in the right-of-way beneath Doris Avenue (Tetra Tech 2017).

CCR Title 5, Education Section 14010(h) requires that new school sites shall not be located within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study conducted by a competent professional. Hazardous pipelines are defined as:

- Pipelines carrying chemical products, natural gas, and other hydrocarbon products that are operating at a pressure of 80 pounds per square inch gauge (psig) or higher; and
- High-volume water lines, which are defined as water lines 12 inches or greater in diameter, and include open aqueducts of comparable and greater volume handling capacity.

A Pipeline Risk Assessment (PRA) was performed by JHE in August 2017 to evaluate whether the 10-inch diameter SCGC natural gas pipeline or City of Oxnard high volume water pipeline could pose an unacceptable safety hazard to the project site (JHE 2017). The risk analysis was prepared in accordance with guidelines set forth in the February 2007, California Department of Education (CDE) Guidance Protocol for School Site Pipeline Risk Analysis (CDE Protocol) (CDE 2007).

The Pipeline Risk Assessment for the natural gas pipeline indicated that the estimated annual individual risk associated with the SCGC 10-inch diameter high-pressure natural gas distribution pipeline is 8.6×10^{-10} , well below the CDE risk threshold for new school facility sites of 1×10^{-6} . Therefore, the population risk indicator for the project site is zero for the high-pressure natural gas pipeline and the high-pressure natural gas pipeline is not considered to pose an unacceptable safety hazard for school facility development at the proposed educational facilities site (JHE 2017).

The high-volume water pipeline risk analysis indicated that in the unlikely event of failure of the City of Oxnard municipal water distribution pipeline located within the Doris Avenue right-of-way, portions of the project site could be subject to physical impact and sheet flow runoff. This east-west trending pipeline is located approximately 5 feet north of the northern boundary of the project site. Physical impacts would be greatest within approximately 25 feet of the pipeline alignment. Released water would be expected to flow across much of the project site. However, the depth of water would not be expected to exceed 0.5 to 1.0 feet and potential inundation at the project site is not, therefore, considered to pose a significant safety hazard.

JHE recommended that site development plans take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. The conceptual site plan is consistent with this recommendation with the nearest structure (Administrative Building) located 37 feet from Doris Avenue. Nonetheless, Mitigation Measure HAZ-1 has been added that requires areas in closest proximity to the high-volume water pipeline to be considered for low average occupancy level uses, such as parking lots, or designated as landscaped "buffer" areas. This mitigation measure was added to ensure that final project design maintains an adequate setback distance from the high pressure water pipeline.

To provide an added degree of risk management, Mitigation Measure HAZ-2 has been added that requires any emergency plan documents that are prepared for the educational facilities to identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident. With implementation of Mitigation Measures HAZ-1 and HAZ-2 project impact would be less than significant.

Would the project emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Pesticide Hazards

Historical and current use of the property has been for agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in the surface soils. Based on the fact that future development of the property includes planned school sites, large areas of the site are scheduled to be disturbed by demolition, grading, and reconstruction. These activities may result in the completion of ingestion, inhalation, and dermal exposure pathways via wind-blown dust, soil carried to different parts of the site by heavy equipment, and adhesion to site worker clothing.

A Screening Health Risk Assessment was performed as part of the PEA to estimate non-carcinogenic and carcinogenic human health risks posed by OCP and arsenic concentrations in soil in accordance with EPA and DTSC guidance (ATC 2017a). The PEA Screening Health Risk Assessment for human health effects involves identifying potential chemicals of concern and comparing a calculated dose for these chemicals to health-based levels developed by EPA and DTSC. For the PEA screening evaluation, the Screening Health Risk Assessment evaluated potential exposures, doses, and risks for four potential on-site receptors, including hypothetical resident, future school worker, future student, and construction worker exposure scenarios. For this analysis, the Screening Health Risk Assessment was performed utilizing data obtained from the December 2016 site assessment.

Exposure to chemicals can only occur if there is a complete pathway by which chemicals in site soil, water, or air can be contacted by humans. Therefore, the evaluation of exposure pathways is the first step in the human health screening evaluation. Potential dose and risk are then calculated based on an evaluation of potential exposure concentrations of chemicals of concern, and the toxicity of the chemicals.

Following development, it is anticipated that only limited portions of the site would be exposed and available for contact by future students and school workers. The potential for direct contact with soil under anticipated future site conditions is expected to be minimal. Consistent with agency guidance for baseline risk assessments, it was assumed that the site will be uncovered and that bare soils will be available for contact for the purpose of the screening human health evaluation. Consequently, children attending the school, certain school staff, and workers engaged in construction activities could potentially be exposed to site chemicals through incidental ingestion, dermal contact, and inhalation of vapors and particulates from chemicals in soil.

Chemicals of Potential Concern (COPCs) include constituents that are present in soil that may result in adverse health effects under the defined conditions of exposure. The PEA sampling activities included analysis for arsenic, a naturally-occurring element that may also be associated with historical arsenic based pesticides, and organochlorine pesticides (OCPs). The Screening Health Risk Assessment concluded that the estimated upper-bound hazard indices for non-carcinogenic human health risk are 0.2 for the hypothetical future site resident, 0.014 for the site worker, 0.067 for the construction worker, and 0.019 for the student. The results of the Screening Health Risk Assessment indicated that the presence of OCPs in soil is not expected to result in adverse, non-cancer health impacts to any of the potential receptors evaluated.

Estimates of potential cumulative upper-bound lifetime incremental cancer risks ranged from 6.3×10^{-6} for the hypothetical future resident to 2.6×10^{-7} for the construction worker scenarios. The lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} typically utilized by DTSC to determine whether a removal action is warranted to protect human health for unrestricted land uses. Upper-bound lifetime incremental cancer risk estimates for the school site receptors are 1.3×10^{-6} for the site worker, 2.6×10^{-7} for the construction worker, and 6.9×10^{-7} for the student. The lifetime incremental cancer risk estimates are consistent with or below the DTSC's 1×10^{-6} point of departure for the site worker, site student, and construction worker. Based on the results of the Screening Health Risk Assessment, the concentrations of OCPs, including toxaphene, detected in soil samples collected during this investigation would pose a significant risk to the hypothetical future resident but do not present a significant risk to future site workers, students or construction workers.

While no residential uses are proposed as part of the project, the Screening Health Risk Assessment did indicate that the lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} utilized by DTSC. In the event that unrestricted (residential) use of the property is desired, consideration should be given to performing removal or remedial actions designed to reduce the concentrations of toxaphene in soil to levels that are suitable for residential use.

In a letter dated May 4, 2017, DTSC approved the PEA report requiring that a Land Use Covenant (LUC) be implemented to limit the project site's future use to non-residential purposes and a Soil Management Plan (SMP) be prepared to protect site workers during grading operations (DTSC 2017a). A SMP was prepared, dated May 17, 2017 (ATC 2017b), that should be implemented during grading activities at the project site. DTSC approved the SMP in a letter dated June 14, 2017 (DTSC 2017b). Mitigation Measure HAZ-3 has been incorporated to ensure that the LUC be prepared and implemented under DTSC oversight to the satisfaction of DTSC. Mitigation Measure HAZ-4 has been incorporated to ensure that the SMP is implemented to the satisfaction of DTSC. With compliance with Mitigation Measures HAZ-3 and HAZ-4, the project impact would be less than significant.

Potential Soil Gas Hazard

The PEA found levels of methane in soil gas that would not result in significant impacts to any receptors for the proposed project (ATC 2017a). The maximum detection of methane in soil gas (15.26 ppmv) fell at a level far below the LEL. Soil gas emissions from the underlying oil field or nearby high pressure natural gas pipelines thus do not pose a significant impact to the project site. Therefore, project impact would be less than significant.

Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not located on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, no project impact would result.

Would the project be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?

The proposed project lies within the Oxnard Airport SOI and the site's southern and northern boundaries lie approximately 1,800 feet and 2,700 feet respectively from the runway centerline. Decisions regarding development projects near airports should not be taken lightly as aircraft accidents can have disastrous implications. Consequently, agencies at federal, state, and local levels have developed various criteria to help guide local planning agencies in their decision-making (Heliplanners 2017).

The project site does not lie within the areas addressed by planning standards published by the FAA in its Airport Design advisory circular. Caltrans Aeronautics Division recommended exploring other sites further from the runway, but does not recommend against the proposed site based on their evaluation of existing conditions. The California Airport Land Use Planning Handbook discourages schools within the Traffic Pattern Zone, but does not prohibit them. The handbook's recommendations within specific zones are not meant to override local Airport Land Use Commission findings.

The Ventura County Transportation Commission (VCTC) acts as the County's Airport Land Use Commission (ALUC) per state law. The VCTC is charged with reviewing land use proposals within certain planning boundaries, with the goal of promoting compatibility between airport operations and nearby land uses. These boundaries are defined in the Commission's Airport Comprehensive Land Use Plan (CLUP) for Ventura County. The project site lies within the Traffic Pattern Zone (TPZ) defined by the CLUP. According to the CLUP adopted land use compatibility standards in safety zones for civilian airports (CLUP Table 6B), schools are an unacceptable use in the TPZ. The VCTC, acting as the Airport Land Use Commission for Ventura County has the responsibility of making an official finding of consistency or inconsistency. In a letter addressed to Caltrans Division of

Aeronautics, dated July 23, 2014, the VCTC found the proposed project to be inconsistent with the CLUP, and stated concerns related to the students' safety in the event of an aircraft accident on-site.

The County of Ventura Department of Airports also found the school site to be unacceptable as proposed, referencing CLUP considerations, noise, and safety (August 8, 2014). Should the School District choose to pursue the site, the Department of Airports requests that an aviation easement be granted as a condition of development. They requested that the easement require parent notification of proximity to the airport and the associated traffic pattern, noise, and safety hazards therein. OSD is tentatively agreeable to granting such an easement subject to the District's formal legal review and concurrence.

An analysis of imaginary surfaces defined in FAR Part 77 indicates that the proposed structures within the Doris Avenue/Patterson Road Education Facilities Project would likely comply with all relevant criteria and would not be considered obstructions or hazards to aviation. However, the project must be submitted to the FAA for an obstruction evaluation prior to construction because buildings and other elements would penetrate the FAR Part 77-specified "notice surface", which represents a threshold level for FAA review. This can normally be done as a blanket application covering the entire proposed development, provided structural heights are known (or covered from a conservative "worst-case" perspective). Attention should be given to locations and heights of trees (at maturity) and powerlines, light standards, etc. once that information is available. Proactive measures can normally be taken to ensure that these items will not violate FAR Part 77 criteria. Mitigation Measure HAZ-5 has thereby been added to ensure compliance with FAR Part 77 requirements.

An aircraft accident can occur at any time and at any place. An accident within or near the project site could involve an aircraft taking off from or landing at Oxnard Airport or it could involve an aircraft enroute between two other airports, with no connection to Oxnard Airport. There is no way to completely guard against such occurrences. We can, however, assess the relative probability of an accident occurring within a specific area. One method of estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years. However, there are no "standards" that specifically address this issue. Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.

The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the "worst-case scenario" project impact from airport hazards would therefore be considered potentially significant and unavoidable.

3.8.2.4 Cumulative Impacts

The proposed project would result in a less than significant contribution to cumulative impacts on hazardous materials. The proposed project and all new building projects within the surrounding study area (City and the County) would be required to comply with the applicable State and local requirements, including, but not limited to, the DTSC, CDE, FAR, Caltrans DOA, Ventura County, and the City of Oxnard, and would be required to implement recommendations of the site-specific PEA Report and associated DTSC approval letters, and the PRA Report.

The proposed project would contribute to the cumulative effect of reduction in potential emergency landing areas surrounding Oxnard Airport. However, lands north and west of the airport are devoted to agricultural or open space uses within the San Buenaventura-Oxnard Greenbelt, which is protected from future development. Those lands would therefore remain available for emergency landings if needed. As noted above, the City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). Therefore, in order to account for the "worst-

case scenario” project impact from airport hazards would therefore be considered potentially significant and unavoidable.

3.8.2.5 Mitigation Measures

HAZ-1: Project development plans shall take the presence of the high-volume municipal water distribution pipeline into consideration with the goal of minimizing student and staff use of areas within 25 feet of the pipeline alignment. Land within this area shall be considered for low average occupancy level uses, such as parking lots, or designated as landscaped “buffer” areas.

HAZ-2: All emergency plan(s) that are prepared for the educational facilities shall identify the presence of the high-pressure natural gas pipeline and the high-volume municipal water distribution pipeline and include an emergency contact list with phone numbers to be used in the event of an incident.

HAZ-3: An LUC shall be prepared, approved by DTSC, recorded with the County of Ventura Recorder’s Office and implemented in accordance with DTSC requirements. This LUC will insure that the project site’s future use is restricted to non-residential purposes.

HAZ-4: During grading and project construction activities the DTSC approved SMP shall be implemented to the satisfaction of DTSC.

HAZ-5: Prior to completion of final design, plans shall be submitted to the FAA for an obstruction evaluation to determine if buildings and other elements (including construction activities) would penetrate the FAR Part 77-specified “notice surface”.

3.8.2.6 Level of Impact After Mitigation

Implementation of mitigation measures identified above would reduce potentially significant impacts related to hazards and hazardous materials to a less than significant level for all topics except for airport hazards. In order to account for the “worst-case scenario” project impact from airport hazards would be considered potentially significant and unavoidable.

3.9 HYDROLOGY AND WATER QUALITY

This section discusses the potential hydrology and water quality impacts from the proposed project. This section is partially based on the Phoenix Civil Engineering, Inc. Oxnard School District – Doris Avenue/Patterson Road Educational Facilities – Project Water Resource System Analysis (2017) (Appendix J), Teal Club Specific Plan’s Water Supply Assessment prepared by Milner-Villa Consulting in August 2014 and the Teal Club Development Infrastructure Review prepared by Kennedy/Jenks in 2007.

3.9.1 Environmental Setting

3.9.1.1 Existing Conditions

Surface Water

The project site is located within the Santa Clara River Watershed, which has an area of approximately 1,634 square miles. The Santa Clara River, which generally flows in a westerly direction for approximately 84 miles, is the largest river system in Southern California that remains in a relatively natural state. The river originates on the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows to the Pacific Ocean near the City of Ventura. The climate of the watershed is characterized by long, dry periods and a relatively short wet period during winter.

The *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Regional Water Quality Control Board [RWQCB], Los Angeles Region [Los Angeles RWQCB] 2014) (Basin Plan) applies a classification system developed by the Los Angeles RWQCB, which divides surface waters into hydrologic units, areas, and subareas. The Basin Plan indicates the project area is located within the Calleguas Hydrologic Unit (HU) (HU 30000). The Calleguas HU is divided into Hydrologic Areas (HAs) which are then divided into Hydrologic Sub-Areas (HSAs). The project area is located in the McGrath Lake HSA (HSA 202) of the McGrath Lake HA (HA 30200).

The City of Oxnard relies on storm drain facilities maintained by the City of Oxnard Public Works Department Operations Division and Ventura County Watershed Protection District (VCWPD) to convey stormwater runoff. The drainage system eventually discharges to the Pacific Ocean. The project site is located within the City of Oxnard’s West Fifth Street watershed which drains approximately 802 acres (1.25 square miles). The cumulative site drainage is directed toward a 24-inch corrugated metal pipe culvert under North Patterson Road at the corner of the Teal Club Road and North Patterson Road. This culvert outlets into an open unlined drainage ditch that runs west to Victoria Avenue along the north side of Teal Club Road, before discharging to the West Fifth Street Drain. The West Fifth Street Drain ultimately discharges to the Edison Canal which is an intake canal to the Mandalay Generating Station owned by NRG Energy.

Downstream of the project site, the Channel Islands Harbor and an associated beach, Hobie Beach, are designated as impaired for bacteria (State Water Resources Control Board 2012).

Groundwater

The Oxnard Plain Groundwater Basin in the project site area extends to approximately 2,000 feet bgs. It is composed of the Oxnard Plain Forebay and the Oxnard Plain Pressure Groundwater Sub-Basin that includes a Semi-Perched Zone and clay cap that is exposed at the ground surface that is underlain by an Upper Aquifer System (UAS) and a Lower Aquifer System (LAS) (Figure 3-3). The Semi-Perched Zone is composed of geologically Recent stream-deposited sand, gravel, and clay from the that form intermittent water bearing units above the clay cap and extends to and average depth of approximately 75 feet bgs. The Semi-Perched Zone is recharged directly from infiltration of precipitation and irrigation from the ground surface. It is separated from the underlying UAS by the clay cap that is up to 180 feet thick that forms an aquitard that largely restricts hydraulic communication with the underlying UAS and LAS. Groundwater occurs near the ground surface in the Semi-Perched Zone (Ventura County Department of Public Works 1975). Groundwater in the Semi-Perched Zone was

encountered at the project site at depths ranging from approximately 14 to 21 feet bgs in soil borings completed during August 2017 (ESSC 2017). Groundwater in the Semi-Perched Zone is typically not used due to limited well yield and poor water quality. The UAS and LAS serve as the primary source for groundwater in the Oxnard region. The UAS and LAS are composed of Pleistocene age stream-deposited sands and gravels deposited by the ancestral Santa Clara River. The structure of the UAS is more planar than the LAS because the UAS is younger and has not been subjected to as much tectonic folding and faulting as the LAS. The UAS is separated from the deeper LAS by a clay lens that averages over 80 feet in thickness. Groundwater recharge to the UAS and LAS is primarily from surface and subsurface flows of the Santa Clara River that infiltrate in the Oxnard Plain Forebay located beneath the El Rio area of northern Oxnard where the Semi-Perched Zone and clay cap is not present (Ventura County Department of Public Works 1975). The City of Oxnard currently operates 10 wells for groundwater production that are completed in the UAS and LAS as part of the City's water supply. None of the City's wells are located within the project area.

Flood Hazard Zones

As shown in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Ventura County and Incorporated Areas, the project site is located within a Zone X, Other Flood Area (FEMA 2010). According to the legend included on FIRM Panel 06111C0905E (FEMA 2010) for Ventura County and Incorporated Areas, the Zone-X Other Flood Areas designation indicates areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than one foot, or with drainage areas less than one square mile; and areas protected by levees from the 1% annual chance flood.

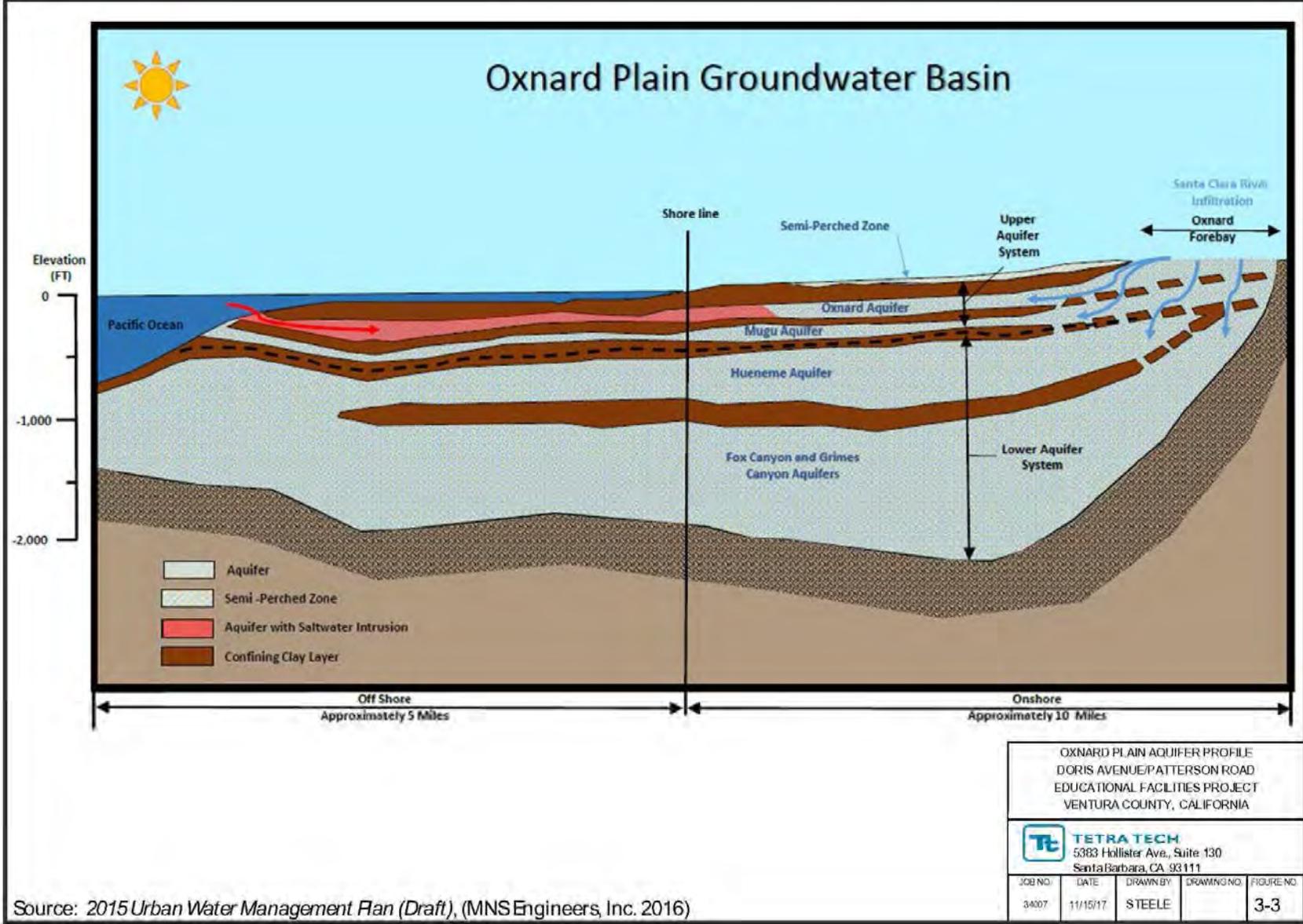
A dam that stores more than 1,000 acre-feet of water, is higher than 150 feet, and has the potential to cause downstream property damage is classified as a high hazard dam by FEMA. A review *Ventura County General Plan, Hazards Appendix (County of Ventura 2013)* and the *Multi-Jurisdictional Hazard Mitigation Plan for Ventura County, California (County of Ventura 2005)* indicates that there are four major reservoirs in the Santa Clara River watershed upstream of the project site that are FEMA high hazard dams that would inundate the project area in the event of a reservoir failure. The location of these reservoirs is identified in Figure 3-4 and information for each of these dams is summarized below.

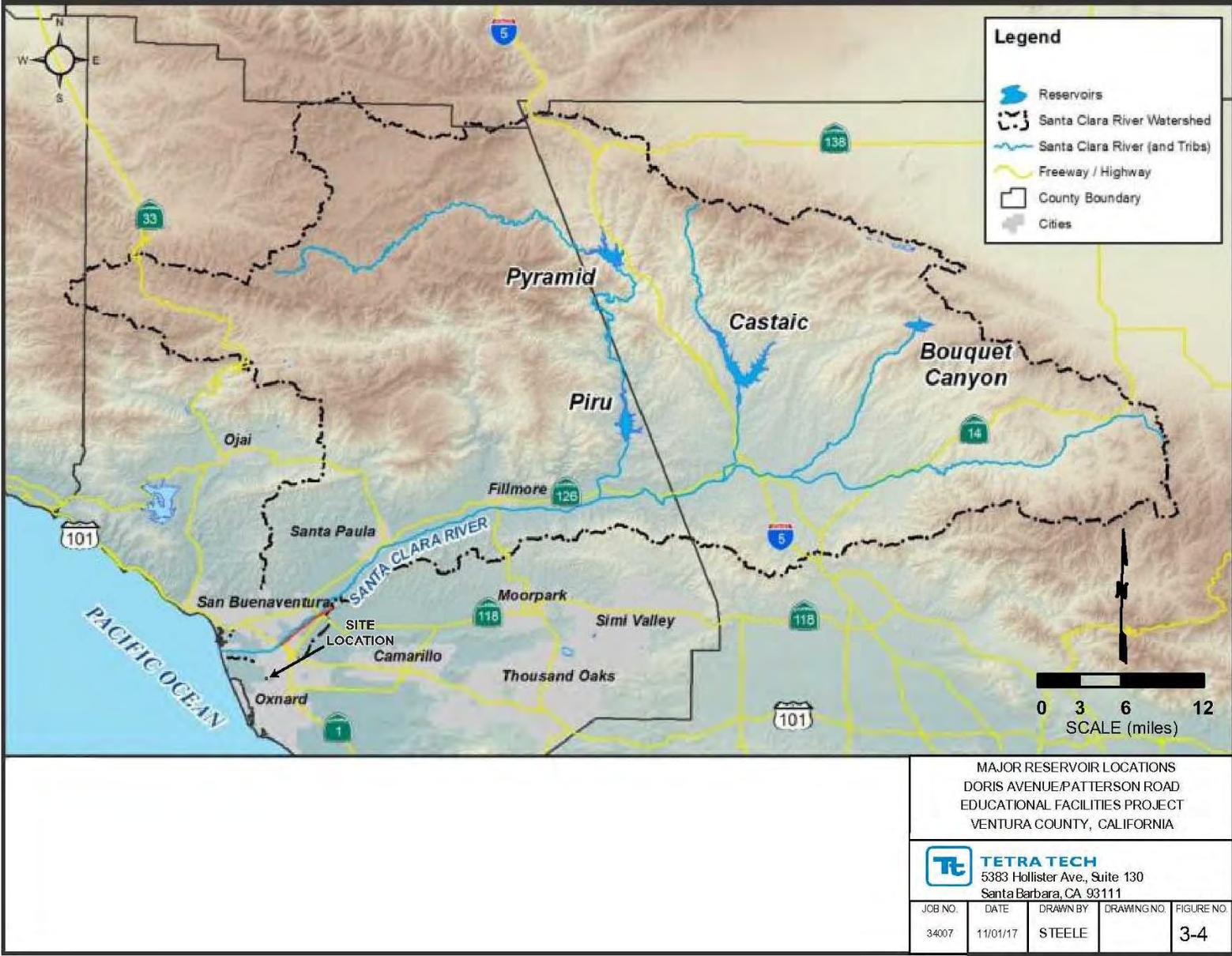
Santa Felicia Dam. The Santa Felicia Dam (Lake Piru) is operated by the United Water Conservation District (UWCD), can hold up to 100,000 acre-feet of water, and is located on Piru Creek approximately 35 miles upstream of the Site. Data provided by the United Water Conservation District (UWCD) indicates that the Site would be inundated by flood waters between 4 and 4.5 after the dam failure (UWCD 1974).

Castaic Dam. The Castaic Dam is operated by the California Department of Water Resources (CDWR), can hold up to 325,000 acre-feet of water, and is located on Castaic Creek approximately 45 miles upstream of the Site (Figure 3-4). Data provided by the CDWR indicates that the Site would be inundated by flood waters between 4 and 5 hours after a failure of the Castaic Dam (CDWR 1975).

Pyramid Dam. The Pyramid Dam is operated by the CDWR, can hold up to 179,000 acre-feet of water, and is located on Piru Creek approximately 20 miles upstream of the Santa Felicia Dam and 55 miles upstream of the Site (Figure 3-4). Data provided by the CDWR indicates that the Site would be inundated by flood waters between 4 and 5 hours after a failure of the Pyramid Dam (CDWR 1998).

Bouquet Canyon Dam. The Bouquet Canyon Dam is operated by the Los Angeles Department of Water and Power (LADWP), can hold up to 36,500 acre-feet of water, and is located approximately 60 miles upstream of the Site (Figure 3-4). Data provided by the LADWP indicates that the Site would be inundated by flood waters between 5 and 5.5. hours after a failure of the Bouquet Canyon Dam (LADWP 2015).





3.9.1.2 Regulatory Setting

Federal

In 1972, the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act [CWA]) was amended to prohibit the discharge of pollutants into waters of the United States from any point source unless the discharge was compliant with a NPDES permit. The CWA was amended again in 1987 to require that the United States Environmental Protection Agency (EPA) establish regulations for the permitting of stormwater discharges (as a point source) by municipal and industrial facilities and construction activities under the NPDES permit program. The CWA requires states to adopt water quality standards for water bodies, which consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, fishing), along with water quality criteria necessary to support those uses. If designated beneficial uses of a particular water body are being compromised by water quality, Section 303(d) of the CWA requires states to identify and list that water body as impaired. Once a water body is deemed impaired, a Total Maximum Daily Load (TMDL) must be developed for each impairing water quality constituent. A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards. The receiving waters for the project site, as described in greater detail below, has constituents on the 303(d) list and is considered impaired; several TMDLs have been developed to address the impairments.

State

California's primary statute governing water quality and water pollution is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resources Control Board (SWRCB) and the nine RWQCB broad powers to protect water quality. The Porter-Cologne Act grants the SWRCB and RWQCB the authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require clean-up of discharges of hazardous materials and other pollutants. Each RWQCB must formulate and adopt a water quality plan for its region. The Los Angeles RWQCB has adopted a Basin Plan for its region of responsibility, which includes the project Site. The RWQCB has delineated water resource area boundaries based on hydrological features, and have identified specific beneficial uses for each of the hydrologic areas described in the Basin Plan. The Basin Plan has also established narrative and numeric water quality objectives for inland surface streams, wetlands, groundwaters, and ocean waters. If these objectives are exceeded, the Los Angeles RWQCB can use its regulatory authority to require municipalities to reduce pollutant loads to the affected receiving waters.

All construction-sites over one acre are subject to the State of California Construction General Permit (CGP), which regulates stormwater discharge from construction activities. The CGP requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that contains specific actions, termed best management practices (BMPs), to control the discharge of pollutants, including sediment, into local surface water drainages. A Notice of Intent (NOI) to perform work under the CGP must be filed with the State.

The California's Dam Safety Act (Section 8589.5 California Emergency Services Act) requires the preparation of dam inundation maps showing areas of potential flooding in the event of sudden or total dam failure as well as emergency procedures for notification and evacuation of nearby residents (County of Ventura 2013).

Local

On June 6, 2013, the Los Angeles RWQCB adopted Order No. R4-2013-0095, General NPDES Permit No CAG994004, *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (Groundwater Discharge Permit). This permit regulates discharges of treated and untreated groundwater from construction to surface waters. This Permit specifies the discharge prohibitions, receiving water limitations, monitoring and reporting program requirements, and general compliance determination criteria for groundwater dewatering during construction activities and drilling, construction, and purging of wells. Dischargers are required to collect and analyze representative groundwater sample, and based on the results dischargers would be required to provide

treatment for any toxic compounds detected above the applicable screening levels. To obtain coverage under the Groundwater Discharge Permit, each permittee must submit an NOI.

Since July 8, 2010, the County of Ventura has been subject to the *Waste Discharge Requirements for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein* (MS4 Permit), Permit No. R4-2010-0108, NPDES Permit No. CAS004002. The VCWPD is the Principal Permittee, and the City of Oxnard is a Co-permittee along with the County of Ventura and all of the other cities within the County. Part 4, Section E of the MS4 Permit includes Planning and Land Development requirements. The goal of the Planning and Land Development Program is to minimize runoff pollution typically caused by land development and protect the beneficial uses of receiving waters. In order to achieve this goal, the MS4 Permit requires new development and redevelopment to control pollutants, pollutant loads, and runoff volume emanating from impervious surfaces by limiting the effective impervious area (EIA) to 5% or less of the project area. New development and redevelopment must also be able to accommodate water from a 0.75-inch storm event with no water leaving the site. These requirements must be achieved through implementing BMPs. To assist developers comply with these requirements, the County developed the Ventura County Technical Guidance Manual for Stormwater Control Measures (TGM) (County of Ventura 2015). The TGM prescribes the use of stormwater management control measures for new development and redevelopment projects in the County of Ventura and the incorporated cities therein. The TGM includes guidance for mitigating potential water quality impacts from new development and redevelopment projects.

The City of Oxnard Municipal Code (OMC) Chapter 22, Article XII relates to stormwater quality management. The article prohibits non-stormwater discharges into the City's MS4. OMC Section 22-219 requires a Stormwater Pollution Control Plan (SWPCP) for new development over four lots. The SWPCP requires implementation of BMPs to effectively prohibit the entry of pollutants from the construction-site into the storm drain system during construction.

Chapters 4, 5, and 6 of the City of Oxnard 2030 General Plan (City of Oxnard 2011) describes relevant goals and policies applicable to water supply and quality, stormwater drainage, water resources, and flood control.

The Ventura County Sheriff's Department Office of Emergency Services (OES) is responsible for disaster coordination and planning including implementation of the County's Dam Failure Response Plan (County of Ventura 2013).

The relevant goals and policies applicable to new schools within the City, as applied to Hydrology and Water Quality as described in Chapters 3, 4, 5 and 6 of the City of Oxnard 2030 General Plan (2011) are described as follows.

Chapter 3 Community Development

- Goal CD 8: Sensible urban development and redevelopment based on the City's ability to provide necessary governmental services and municipal utilities.
- Goal CD 8-10, Timing of Large Scale Development: Consider at an early stage the infrastructure investment needs of large-scale developments to evaluate these needs as part of long-range water supply, conveyance, wastewater, and other relevant planning.
- Goal CD 16: Coordinated land use and infrastructure decisions with economic development.
- Goal CD 16.4, Evaluate Fiscal Impacts: Evaluate the fiscal impacts of new development and encourage a pattern of development that allows the City to provide and maintain a high level of urban services (fire and police services, water, sewer, solid waste, transportation, parks, etc.) and community facilities as well as attract targeted businesses and a stable labor force.

Chapter 4 Infrastructure and Community Services

- Goal ICS-1: Provision of adequate facilities and services that maintain service levels, with adequate funding.
- ICS-1.1, Maintain Existing Service Levels: Maintain the high priority of providing services to residents and visitors, and prevent deterioration of existing service levels.
- ICS-1.2, Development Impacts to Existing Infrastructure: Review development proposals for their impacts on infrastructure (e.g., sewer, water, fire stations, libraries, streets) and require appropriate mitigation measures to ensure that proposed developments do not create substantial adverse impacts on existing infrastructure and that the necessary infrastructure will be in place to support the development.
- ICS-1.4, Infrastructure Conditions of Approval: New development should not be approved unless:
 - The applicant demonstrates adequate public services and facilities are available;
 - Infrastructure improvements incorporate a range of feasible measures that can be implemented to reduce all public safety and/or environmental impacts associated with the construction, operation, or maintenance of any required improvement;
 - Infrastructure improvements are consistent with City infrastructure master plans; and
 - Required infrastructure needed for future new development is self-funded.
- Goal ICS-11: Water supply, quality, distribution, and storage adequate for existing and future development.
- Goal ICS-11.5, Sustainability of Groundwater Supply: Support the policies of the Fox Canyon Groundwater Management Agency to protect, enhance, and replenish the aquifers underlying the Oxnard Plain.
- Goal ICS-11.9, Groundwater Extractions: Continue to adhere to the recommendations of the Ventura County Regional Water Quality Planning Program regarding groundwater quality and extractions.
- Goal ICS-11.11, Water Quality: Monitor water quality regularly to ensure that safe drinking water standards are met and maintained in accordance with State agencies with jurisdiction and Environmental Protection Agency (EPA) regulations, and take necessary measures to prevent contamination.
- Goal ICS-11.13, Water Neutral Policy and Urban Water Management Plans: Incorporate the City's Water Neutral Policy regarding new development into the 2010 Urban Water Management Plan and develop appropriate ordinances, policies, and/or programs to fully implement the policy.
- Goal ICS-12: Adequate capacity at the City Waste Water Treatment Plant to accommodate existing and future development.
- ICS-12.3, Wastewater Discharge Monitoring: Monitor and ensure that discharges comply with approved permits.
- ICS-12.4, Wastewater Discharge: Treat all wastewater in compliance with approved discharge permits.
- ICS-12.5, Sedimentation Control: Require by conditions of approval that silt and sediment from construction be either minimized or prohibited.
- Goal ICS-13: Adequately sized storm drain systems and discharge treatment, certified levees, and implementation of appropriate NPDES permits and regulations.
- ICS-13.1, 100-year Floodplain: Discourage development, major infill, and structural improvements (except for flood control purposes) within the 100-year floodplain as regulated by FEMA. Recreational activities that do not conflict with habitat uses may be permitted within the floodplain.

- ICS-13.2, Adequate Storm Drains and NPDES Discharge Treatment: Provide storm drainage facilities with sufficient capacity to protect the public and property from the appropriate storm event and strive to meet stormwater quality discharge targets set by NPDES and related regulations.
- ICS-13.3, Stormwater Detention Basins: Design stormwater detention basins to ensure public safety, to be either visually attractive or unobtrusive, provide temporary or permanent wildlife habitats, and recreational uses where feasible in light of safety concerns.
- ICS-13.4, Low Impact Development: Incorporate low impact development (LID) alternatives for stormwater quality control into development requirements. LID alternatives include: (1) conserving natural areas and reducing imperviousness, (2) runoff storage, (3) hydro-modification (to mimic pre-development runoff volume and flow rate), and (4) public education.

Chapter 5 Environmental Resources

- Goal ER-5: Well managed water supply and wastewater treatment programs that together meet expected demand, prevent groundwater overdraft, and ensure water quality.
- ER-5.1, Wastewater Treatment: Treat all wastewater in compliance with approved discharge permits.
- ER-5.2, 208 Wastewater Control Plan: Support updating the “208” Wastewater Control Plan to control urban and nonurban runoff.
- ER-5.3, Reducing Dependence on Groundwater: The City shall maintain a minimal dependence on Basin 4A groundwater consistent with the Groundwater Resource Encroachment and Treatment (GREAT) Program and support the policies of the Fox Canyon Groundwater Management Agency to protect, enhance, and replenish the aquifers underlying the Oxnard Plain.
- ER-5.4, Wastewater Monitoring: Monitor all wastewater discharges on a periodic basis to ensure that discharges comply with approved permits.
- ER-5.6, 208 Groundwater Plan: Adhere to the recommendations of the 208 Plan regarding groundwater extractions.
- ER-5.7, Minimizing Paved Surfaces: Require minimization and/or permeability of paved surfaces in new developments and replacement paving, where feasible.

Chapter 6 Safety and Hazards

- Goal SH-1: Minimal damage to structures, property, and infrastructure as a result of liquefaction and subsidence.
- SH-1.2, Minimize Subsidence Trends: Avoid increases in the level of groundwater extraction as a method for meeting new water demands if the extraction leads to subsidence, or unless a comprehensive reinjection program is approved and implemented to offset extractions.
- Goal SH-3: New development required to take necessary precautions prior to any construction to mitigate hazards and protect the health and safety of the inhabitants.
- SH-3.1, Location of New Development: Encourage new development to avoid areas with high geologic, tsunami, flood, beach erosion, and fire or airport hazard potential.
- SH-3.2 New Development Flood Mitigation: As a condition of approval, continue to require new development to mitigate flooding problems identified by the National Flood Insurance Program and/or other expert information.
- SH-3.3 Updating Flood Insurance Rate Maps: Continue to provide information to FEMA to ensure that Flood Insurance Rate Maps (FIRM) are updated periodically.

- SH-3.4 Avoiding Blockage of Natural Drainage: Continue to review development proposals to ensure that the capacity or ability of natural drainage is not impacted.

3.9.2 Impact Analysis

3.9.2.1 Methodology

Project impacts to hydrology and water quality were evaluated based on the proposed project's adherence to local, State, and federal standards; proposed land use; design; and proposed BMPs for control of surface runoff and reduction of pollutants in runoff. A desktop review was conducted of relevant documents, including:

- *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Los Angeles RWQCB 2014);
- *Technical Guidance Manual for Stormwater Quality Measures - New Development and Redevelopment Projects* (County of Ventura 2015);
- *Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Ventura County and Incorporated Areas* (FEMA 2010);
- *Ventura County General Plan, Hazards Appendix* (County of Ventura 2013);
- *Multi-Jurisdictional Hazard Mitigation Plan for Ventura County, California* (County of Ventura 2005);
- *City of Oxnard California 2030 General Plan, Goals and Policies* (City of Oxnard 2011); and
- Inundation maps for the Santa Felicia Dam (UCWD 1974), Castaic Dam (CDWR 1975), Pyramid Dam (DCDWR 1998), and Bouquet Dam (LADWP 2015).

3.9.2.2 Significance Thresholds

The significance criteria for this analysis is from Appendix G of the State CEQA Guidelines. The proposed project would result in a significant impact if it would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on-site or off-site.
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place within a 100-year flood hazard area, structures that would impede or redirect flood flows.
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

3.9.2.3 Project Impacts

Would the project violate any water quality standards or waste discharge requirements?

Construction would disturb approximately 25 acres. During construction, pollutants of concern include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Additionally, excavated soil would be exposed, so there would be an increased potential for soil erosion compared to existing conditions. Lastly, chemicals, petroleum products (such as paints, solvents, and fuels), and concrete-related waste could spill

or leak and have the potential to be transported via storm runoff into downstream receiving waters (ultimately the Pacific Ocean). Since the project will disturb greater than one acre of land, the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, the project a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment controls designed to minimize erosion and retain sediment on-site, and good housekeeping BMPs intended to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Prior to terminating coverage under the Construction General Permit, the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity. The proposed project includes a mix of landscaping and hardscape, which will prevent any increase risk of sediment discharge.

Due to the depth to groundwater (14-21 feet bgs) on-site, it is not anticipated that the groundwater table would be encountered during excavation. However, perched groundwater may be encountered in localized areas during excavation and may require dewatering. Groundwater may contain high levels of total dissolved solids and other constituents that could be introduced to surface waters. Any groundwater dewatering performed during excavation would be completed in accordance with the Los Angeles RWQCB's Groundwater Discharge Permit. This permit requires testing and treatment (as necessary) of groundwater prior to its discharge off-site. If perched groundwater is encountered during construction, then under Mitigation Measure HYDRO-1, the OSD shall apply for coverage under the Los Angeles RWQCB's Groundwater Discharge Permit, and adhere to the permit provisions therein to ensure that the project would not violate any water quality standards or waste discharge requirements.

During operation of the proposed project (new elementary school, middle school, District administrative center), pollutants of concern include sediments, nutrients, metals, pesticides, organic materials/oxygen-demanding substances, oil and grease/organics associated with petroleum, bacteria and viruses, and trash and debris (gross solids and floatables). Additionally, the proposed project would result in a permanent increase in impervious surface area of 13.96 ac. An increase in impervious area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. Prior to terminating coverage under the Construction General Permit and pursuant to the Ventura County TGM (2015), the project site must implement stormwater control measures that treat post-construction runoff (i.e., water quality, flow, and volume).

Stormwater control measures that would be incorporated into the design of the proposed project to treat stormwater runoff include a dry extended detention basin coupled with hydrodynamic separation devices to target pollutants of concern for the project site (Phoenix Civil Engineering, Inc. [Phoenix] 2017). The Ventura County TGM describes dry extended detention basins as having outlets designed to detain the stormwater quality design volume for 36 to 48 hours to allow sediment particles and associated pollutants to settle and be removed. Dry extended detention basins do not have a permanent pool and are designed to drain completely between storm events (2015). The Ventura County TGM describes hydrodynamic separation devices as devices that remove trash, debris, and coarse sediment from incoming stormwater flows using screening, gravity settling, and centrifugal forces. Hydrodynamic separation devices can achieve significant removal of suspended sediments and attached pollutants with less space as compared to wet vaults and other settling devices. Hydrodynamic devices can remove trash, debris, and other coarse solids down to particles the size of sand. Several types of hydrodynamic separation devices can also remove floating oils and grease using sorbent media (2015).

The southern portion of the Site is planned to be soccer fields totaling 6.7 acres. The anticipated project design includes depressing the soccer fields 8-inches below the surrounding grade, or conversely an 8-inch tall earthen berm would be constructed along the western, eastern and southern boundaries to collect and detain Site stormwater runoff. At that depth, the soccer fields would collect 195,640 cubic feet (4.5-acre feet) of runoff, which could be detained for up to two days. Stormwater runoff in excess of this capacity would be released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Drainage System Master Plan (Phoenix 2017). Preliminary calculations performed by Phoenix indicate that 5-acre feet of runoff would be

generated by a 100-year storm event (Phoenix 2017). The project site could detain that volume with only 0.5-acre feet of runoff discharged off-site.

The proposed parking lots would drain to the dry extended detention basins sited within the soccer fields. Runoff from the parking lots would be filtered by hydrodynamic separation devices to remove trash, debris and oil/petroleum products prior to its discharge to the dry extended detention basins. Each parking lot will have one hydrodynamic separation device for treating its runoff (Phoenix 2017).

Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017). All stormwater control measures will be designed according to the requirements of the Ventura County TGM (2015) and would target pollutants of concern from the project site.

The project would connect to the existing sanitary sewer main which conveys domestic wastewater to the Oxnard Wastewater Treatment Plant (OWTP). The OWTP, owned and operated by the City of Oxnard, is a secondary treatment facility located at 6001 South Perkins Road, Oxnard, California (Oxnard Public Works 2015). The OWTP treats and discharges wastewater pursuant to National Pollutant Discharge Elimination System Order No. R4-2013-0094, adopted by the Los Angeles RWQCB on June 6, 2013. The new elementary and middle school, and District administrative center would generate domestic wastewater from restroom and food service facilities, as well as from science labs, which would be treated by the OWTP. The curriculum associated with the science labs would not generate and/or discharge any hazardous wastes to the sanitary sewer.

With compliance with existing regulations including implementation of stormwater BMPs that target pollutants of concern in runoff from the project site, implementation of Mitigation Measure HYDRO-1, and connection to the OWTP, the potential for violation of water quality standards or waste discharge requirements and degradation of water quality would be less than significant.

Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

During construction, it is not anticipated that the groundwater table, which is 14-21 feet bgs, would be encountered during excavation. However, perched groundwater may be encountered in localized areas during excavation and may require dewatering. Any groundwater dewatering performed during excavation would be temporary, not result in a substantial volume removed, and completed in accordance with the Los Angeles RWQCB's Groundwater Discharge Permit. Grading and construction activities would compact soil, and construction of structures would increase impervious area, which can decrease infiltration during construction. However, construction activities would be temporary, and the reduction in infiltration would not be substantial relative to Semi-Perched Zone or the UAS and LAS that are the principal groundwater sources for the Oxnard Plain Groundwater Basin. The UAS and LAS are recharged through infiltration in the Oxnard Forebay area, located approximately two miles northeast of the proposed project area (Figure 3-3). Therefore, construction of the proposed project would not substantially deplete groundwater or interfere with groundwater recharge such that there would be net deficit in aquifer volume or a lowering of the local groundwater table level. Construction impacts related to groundwater supplies would be less than significant, and no mitigation is required.

The City of Oxnard would provide water for the proposed project. The City of Oxnard obtains water from local groundwater, groundwater from the United Water Conservation District (UWCD), and imported water from Calleguas Municipal Water District (CMWD). The City of Oxnard's historical water supply has fluctuated between 26,919 and 28,826-acre feet per year or an upper limit of 25 million gallons per day (Phoenix 2017). The projected water supplies in the City of Oxnard 2015 Urban Water Management Plan are 40,341-acre feet for 2020, 54,341-acre feet for 2025, 2030, 2035, and 2040 (MNS Engineers, Inc. 2016).

The City of Oxnard 2030 Master Plan indicates that the City has already exceeded the reduction limits established by the State of California 2010 Urban Water Management Plan (UWMP) assuming the mandated 132 gallons per capita per day (gpcd) value was used. The use of the mandated consumption value for planning purposes was conservative (City of Oxnard 2011). The proposed school project would comprise approximately 178,678 sq. ft. of building and structures, including joint-use facilities to support a district office, and 220 parking spaces for 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. A variety of playfields and recreational areas would accommodate the recreational needs of the K-8 students on-site (Tetra Tech 2017).

The OSD institutes a standard educational schedule, resulting in approximately 181 school days. Applying an average demand factor of 5.4 gallons per student per school day (Mays 2001), the project would require an additional 1,857,060 gallons of water annually (5.7 acre-feet/year [AFY]) (Tetra Tech 2017). It is assumed that the projection of 5.4 gallons per student per school day includes irrigation. It is total water demand (Phoenix 2017).

The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. Because this value is considered conservative (it equates to three times the amount of demand compared to the Initial Study figure), it was used to estimate project water consumption in the Water Resources System Analysis Report prepared for the project site (Phoenix 2017).

Water for the proposed project would be supplied by the City of Oxnard from an existing 12-inch diameter potable water pipeline that is located within Doris Avenue that extends west from Ventura Avenue to the intersection of Doris Avenue and Patterson Road. It supplies water to the residential tract to the north of the project. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows;

- School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gallons per day); and
- Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gallons per day).

That equates to approximately 2,450 gallons per hour (19,500 gallons/8 hours) assuming an 8-hour day for school occupancy and that the irrigation activities will occur during an 8-hour period at night. The school will be sufficiently supplied by the existing 12-inch diameter water pipeline for this flow rate.

Therefore, water supply demand impacts related to groundwater supplies would be less than significant, and no mitigation is required.

Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on-site or off-site?

No perennial or ephemeral water bodies are located on or close to the site; therefore, the project would not alter the course of a stream or river. During construction activities, the project site would be graded and excavated, exposing soil and increasing the potential for soil erosion compared to existing conditions. During a storm event, soil erosion and sedimentation could occur at an accelerated rate. For example, excavation activities result in soil stockpiles, which has the potential to be washed into storm drains, blown off-site by wind, or tracked off-site by heavy equipment. In addition, construction activities would compact soil, and construction of structures would increase the impervious area, which can increase runoff during construction. Since the project will disturb greater than one acre of land, the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would include, but would not be limited to, erosion and sediment controls designed to minimize substantial erosion or siltation. Prior to terminating coverage under the Construction General Permit, the project site must be stabilized and not pose any additional sediment discharge risk than it did prior to the commencement of construction activity. The proposed project includes a mix of landscaping and hardscape, which will prevent any increase risk of sediment discharge. Implementation of the

site-specific SWPPP during construction activities would reduce the potential for erosion and siltation to less than significant levels.

Currently, stormwater flows from the Site discharge to an open unlined drainage ditch that runs west to Victoria Avenue along the north side of Teal Club Road, before discharging to the West Fifth Street Drain. The West Fifth Street Drain ultimately discharges to the Edison Canal which is an intake canal to the Mandalay Generating Station owned by NRG Energy. The proposed on-site uses (new elementary school, middle school, District administrative center) would change on-site drainage patterns by adding impervious surface areas, including buildings and parking lots, and constructing drainage structures. The proposed project is anticipated to install curb and gutter improvements along the north and south sides of the parcel. There would be an access road on the east side of the project site and that paved road is anticipated to have curb and gutter along the west side. These curb and gutter facilities would route stormwater run-on around the site. Additionally, the 2003 Drainage System Master Plan recommended improvements in the area of the Project including storm drainage piping on the east side of Patterson Road from Doris Avenue to Teal Club Road. The proposed facilities are a 30-inch diameter reinforced concrete pipe extending approximately to the southern boundary of the proposed project, and a 36-inch diameter reinforced concrete pipe extending to approximately 250 feet from the intersection with Teal Club Road. At Teal Club Road, the storm drainage system would transition to a 42-inch diameter reinforced concrete pipe. These facilities have not been constructed (Phoenix 2017).

The proposed project would result in a permanent increase in impervious surface area of 13.96 ac. An increase in impervious area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. Prior to terminating coverage under the Construction General Permit and pursuant to the Ventura County TGM (2015), the project site must implement stormwater control measures that treat post-construction runoff (i.e., water quality, flow, and volume). Stormwater control measures that would be incorporated into the design of the proposed project to treat stormwater runoff include a dry extended detention basin coupled with hydrodynamic separation devices to target pollutants of concern for the project site (Phoenix 2017). Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017). Through a combination of these stormwater control measures, both on-site and off-site flooding will be controlled. These stormwater controls would also prevent on-site and off-site erosion and siltation.

There are no on-site streams or rivers; therefore, the project would not alter the course of a stream or river. Although the existing drainage pattern of the site would be substantially altered, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation or flooding on- or off-site with compliance with existing regulations. Operational impacts related to on- or off-site erosion, siltation, and flooding would be less than significant, and no mitigation is required.

Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

During construction, the proposed project has the potential to introduce pollutants into the stormwater drainage system from erosion, siltation, and accidental spills. Additionally, grading and construction activities would compact soil, and construction of buildings and parking lots would increase impervious area, which will increase runoff during construction. Lastly, dewatering of perched groundwater could introduce groundwater containing high levels of total dissolved solids and other constituents to surface waters. Since the project would disturb greater than one acre of land the project must comply with the Construction General Permit. Pursuant to the Construction General Permit, a site-specific SWPPP must be prepared that details construction BMPs for use during construction activities. Construction BMPs would be implemented to reduce impacts to water quality, including impacts associated with erosion, siltation, spills, and increased runoff. Additionally, any groundwater dewatering would be performed according to the Los Angeles RWQCB's Groundwater Discharge Permit, which would require testing and treatment, as necessary. The potential volume of groundwater discharged during construction cannot be estimated at this time, but would not be substantial and is not anticipated to exceed the capacity of downstream stormwater drainage systems. Compliance with the Construction General Permit and

Groundwater Discharge Permit requirements would reduce the potential for off-site discharge of substantial additional sources of polluted runoff to less than significant levels. Furthermore, compliance with these permits would also prevent the discharge of runoff in excess of existing and planned stormwater drainage systems to less than significant levels.

The proposed on-site uses (new elementary school, middle school, District administrative center) would increase impervious surface area and runoff from the Site, but the proposed on-site dry extended detention basin would be designed to conform with the standards in the Ventura County TMG, thereby reducing the effective impervious area of the Site to no more than 5% of the project area (Phoenix 2017). Additionally, the proposed project anticipates having to install new 30- and 36-inch diameter storm drainage piping infrastructure along Patterson Road from the Site to the existing Teal Club Road facility as documented in the City of Oxnard Drainage System Master Plan. Off-site discharges would be less than the capacity of anticipated storm drainage piping along Patterson Road (Phoenix 2017). Lastly, the project includes basins and hydrodynamic separation devices to treat stormwater runoff from the Site during operation. Therefore, with implementation of BMPs, operational impacts related to exceedance of the capacity of and providing additional sources of polluted runoff to stormwater drainage systems would be less than significant.

Would the project otherwise substantially degrade water quality?

There are no project elements that have not already been considered in the previous analyses that would substantially degrade water quality. Construction activities would adhere to requirements of the Construction General Permit, including development of a site-specific SWPPP and implementation of BMPs that target potential pollutants and additional runoff generated by construction activities. Potential groundwater dewatering activities will comply with the Groundwater Dewatering Permit, which directs testing and treatment (as necessary) of groundwater prior to its discharge off-site. Post-construction stormwater and wastewater would be treated by on-site drainage controls and the OWTP, respectively. Therefore, with compliance with existing regulations project impact would be less than significant.

Would the project place within a 100-year flood hazard area structures that would impede or redirect flood flows?

FIRM Panel 06111C0905E (FEMA 2010) indicates that the project area is within shaded Zone X, an area with a moderate risk of flooding, typically between the limits of the 100-year and 500-year floods. This zone is also used to “designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile” (FEMA, 2012). Because the project area is outside the 100-year flood zone, buildings and residents on-site would not be placed within a flood hazard area. Additionally, the project would not involve placing structures that would impede or redirect flood flows within a 100-year flood hazard area. Therefore, the proposed project would not place within a 100-year flood hazard area structures that would impede or redirect flow and project impact would be less than significant.

Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The need for dam failure disaster planning was demonstrated by the midnight collapse in March 1928 of the St. Francis Dam in Los Angeles County, which occurred after the newly constructed cement arched dam was completely filled for the first time. The ensuing flooding from the dam’s total collapse resulted in the loss of over 400 lives in Ventura County as floodwaters washed out homes and structures along the banks of the Santa Clara River. The communities of Piru, Fillmore, Santa Paula, Bardsdale, Saticoy, Montalvo, and El Rio sustained extensive life and property loss from the flood (County of Ventura 2013).

More recently, the San Fernando Earthquake in 1971 resulted in ground shaking in the vicinity of the Van Norman Dam in Los Angeles County. As a result of the earthquake, structural damage threatened the dam’s immediate

collapse. Approximately 80,000 residents in the San Fernando Valley had to be evacuated to areas of safety in the midst of many other earthquake-related emergencies (County of Ventura 2013).

In Ventura County, disaster coordination and planning is the responsibility of the Ventura County Sheriff's Department OES. Within California's emergency management organizational structure, each county serves as an Operational Area. In this role, Sheriff's OES acts as an agent between Cal OES and the cities (including the City of Oxnard), special districts and unincorporated areas of Ventura County. OES is responsible for countywide disaster planning, mitigation, response and recovery activities. The OES serves as the depository for the County's Dam Inundation Maps and is charged with ongoing maintenance of the County's Dam Failure Response Plan which was adopted by the Board of Supervisors on September 13, 1983. The Dam Failure Response Plan was currently updated by the OES during 2013 (County of Ventura 2013). With compliance with Mitigation Measure HYDRO-2, that requires OSD to develop and implement a Site-specific flooding evacuation plan to be implemented in conjunction with the County of Ventura OES Dam Failure Response Plan, project impacts would be less than significant.

3.9.2.4 Cumulative Impacts

The proposed project is within the City of Oxnard's sphere of influence and the development of the project area was accounted for in the City's 2030 General Plan. The proposed project would increase impermeable surface area in the City. The proposed project and other incremental development would potentially increase peak flood flows, alter drainage patterns, reduce groundwater recharge, and increase pollutants in the regional stormwater. These effects could occur during construction and operation of planned or pending projects. The proposed project and each of the cumulative projects would be subject to California, Ventura County, and the City of Oxnard requirements including the State of California Construction General Permit (CGP), the NPDES and MS4 Permit, the 2011 *Ventura County Technical Guidance Manual for Stormwater Quality Control Measures*. In addition, Los Angeles RWQCB Groundwater Discharge Permit requirements would be imposed for construction dewatering. Each project would be required to develop a SWPPP and Stormwater Pollution Control Plan and would be evaluated individually to determine appropriate BMPs to minimize impacts to surface water quality. Thus, the project's contribution to cumulative impacts to hydrology and surface water quality would be less than significant.

3.9.2.5 Mitigation Measures

HYDRO-1: If perched groundwater is encountered during construction, the OSD shall apply for coverage under the Los Angeles RWQCB's Groundwater Discharge Permit, and adhere to the permit provisions therein.

HYDRO-2: The OSD shall develop and implement a site evacuation plan to be implemented in conjunction with the County of Ventura OES Dam Failure Response Plan.

3.9.2.6 Level of Impact After Mitigation

With implementation of mitigation measures HYDRO-1 and HYDRO-2, project impacts would be less than significant.

3.10 LAND USE PLANNING

This section discusses the potential land use planning impacts from construction and operation of the proposed project. As noted in the Initial Study (Appendix A), the proposed project would not physically divide an established community or conflict with any applicable habitat conservation plans or natural community conservation plans.

3.10.1 Environmental Setting

3.10.1.1 Existing Conditions

The project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB).

The project site has a Ventura County General Plan land use designation of agricultural-urban reserve and a zoning designation of agricultural exclusive (AE-40). Since the project site is also within the SOI of the City of Oxnard, the City of Oxnard General Plan identified land use designations for the site. The City of Oxnard General Plan land use designations for the project site include public/semi-public, open space and park.

The project area is relatively flat and currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east and west. The agricultural land to the west is located within the Ventura-Oxnard Greenbelt. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. Oxnard Airport is an active general aviation/small scheduled service airport and the project site is located within Safety Zone 6, identified as the Traffic Pattern Zone (Caltrans 2014).

3.10.1.2 Regulatory Setting

Federal

There are no applicable federal regulations for land use.

State

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.)

(California Government Code Section 56000 et seq.) State Law State law provides for LAFCoS to be formed as independent agencies in each county in California. LAFCoS implement state law requirements and state and local policies relating to boundary changes for cities and most special districts, including spheres of influence, incorporations, annexations, reorganizations and other changes of organization. In this capacity the Ventura LAFCo is the boundary agency for cities and most special districts in Ventura County (LAFCo 2017).

Public Utilities Code of the State of California, Section 21675

Prior to the amendment of a general plan or specific plan or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article, as stated in Section 21670.

Public Utilities Code of the State of California, Section 21670

It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

Local

City of Oxnard 2030 General Plan

The City of Oxnard 2030 General Plan contains the goals and policies that are intended to guide a wide range of public and private development decisions through 2030.

3.10.2 Impact Analysis

3.10.2.1 Methodology

The evaluation for potential impacts related to land use planning is based on a review of relevant land use plans and studies including the City of Oxnard 2030 General Plan, Ventura County CLUP, and the Aviation Hazard Risk Assessment Report.

3.10.2.2 Significance Thresholds

The thresholds for land use planning impacts used in this analysis are from Appendix G of the CEQA Guidelines and the City of Oxnard CEQA Guidelines. A proposed project would result in a significant impact if it would:

- *Conflict with an applicable land use plan, policy or regulation of the City or other agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating a significant environmental effect.*

3.10.2.3 Project Impacts

Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

City of Oxnard General Plan and Zoning

The project site is currently located within unincorporated Ventura County and the zoning designation is agricultural exclusive (AE-40). Schools are prohibited within the County's AE-40 zone. However, the proposed project includes annexation into the City of Oxnard thereby the County's land use designations would no longer be applicable to the project site.

The District would process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). With the approval of the GPA, Pre-Zone, and Annexation, the proposed project would be consistent with the General Plan and zoning land use designations.

The project site is located within an area that was planned for future development in the City of Oxnard 2030 General Plan. A General Plan Consistency analysis for relevant key land use policies is provide in Table 3-19.

Table 3-19. City of Oxnard 2030 General Plan Consistency Analysis

Policy	Discussion
CD-1.6 Public Facilities: Enhance resident quality of life by providing adequate space for schools, libraries, parks and recreation areas, as well as space for the expansion of public facilities to support the community's vision.	The proposed project would provide two new schools to meet the educational needs of students within OSD. This would be considered a beneficial impact to public educational facilities.
CD-1.7 Compact Development: Promote the use of development patterns that are more compactly built and use space in an efficient manner as part of the community vision.	The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 student's onsite.
CD-1.8 Natural Resource Conservation: Promote a high quality of life within the community, incorporating the retention of natural open space areas, greenbelts, and the provision of adequate recreational facilities.	Land to the west of the project site across Doris Avenue is part of the Ventura-Oxnard Greenbelt and would remain in agricultural use. The proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include a separate playground for the kindergarten with play structures and open space. There will be lower and upper grade play areas with hard courts for tether ball, basketball and volley ball and motor skill development as well as play structures. Grass fields will be used for kickball, soccer, softball, track and field challenges and general play. The elementary school will have a multi-purpose room for some indoor recreational activities during inclement weather and potential after hours community use.
Goal CD-6.1 Agricultural Buffers. Require that agricultural land uses designated for long-term protection and production be buffered from urban land uses through the use of techniques including, but not limited to, greenbelts, open space setbacks, fencing, berming, and windrows.	The District has designed the lay-out of the project in order to minimize compatibly issues with adjacent agricultural uses. Based on input from the Ventura County Agricultural Commissioner, the proposed project was designed to cluster the school facilities within the middle of the northern portion of the site closer to the existing residential neighborhood to the north. The orientation and location of the drop off areas, bus turnouts, and play fields in the proposed site plan were also designed as a result of consultation with the County of Ventura's Agricultural Commissioner. Please refer to the discussion in Section 3.2 for additional details about the agricultural buffer.
CD-6.2 Agricultural Preservation: preserve agricultural land and uses within the Oxnard Planning Area unless other uses are allowed through future CURB amendment and/or applicable exemptions.	The project site is located within the City of Oxnard's SOI and CURB. While the project site is currently used for agriculture, the 2030 General Plan accounted for urban development of the area.
CD-8.4 Cost Sharing: Continue to ensure that any area annexed to the City share equitably in the costs of all necessary municipal improvements.	As identified in Section 3.14, Traffic, mitigation measures were included to provide fair-share contributions toward roadway improvements.
CD-8.5: Ensure that new development avoids or mitigates impacts on air quality, traffic congestion, noise, and environmental resources to the maximum extent feasible.	This EIR evaluates potential impacts related to construction and operation of the proposed project and includes mitigation measures when warranted and feasible to reduce project impact. Mitigation Measures have been identified for air quality, biological resources, cultural resources, geology, hazards, hydrology, noise, and traffic in this EIR.

Table 3-19 (Continued). City of Oxnard 2030 General Plan Consistency Analysis

Policy	Discussion
<p>ER-3.2 Review of Development Proposals: Review development proposals in accordance with applicable Federal, State, and local statutes protecting special-status species and jurisdictional wetlands and be open to requiring greater protection.</p>	<p>No candidate, sensitive, or special-status wildlife or plant species in any local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS were observed during the site visit conducted in July 2017. Additionally, no suitable habitat for these species was found within or directly adjacent to the project site.</p> <p>No designated jurisdictional wetlands or wetland habitats are known to occur within or directly adjacent to the project site based on review of the CNDDDB and USFWS National Wetlands Inventory (NWI) databases. Agricultural ditches were found along the western and southern site boundaries during the July 2017 site visit. Both ditches are predominantly un-vegetated and heavily disturbed. The western ditch was noted as completely dry and the southern ditch had minor ponding (less than 6 inches of water). Since the ACOE does not typically assert jurisdiction over swales, erosional features, or ditches that were excavated primarily to drain uplands that do not carry a permanent flow of water, neither a CWA Section 401 nor 404 permit is anticipated to be required. Likewise, it is not anticipated that a permit pursuant to Section 1602 of the California Fish and Game Code would be required. However, the ACOE, CDFW, and RWQCB reserve the right to regulate these waters on a case-by-case basis. Therefore, if the ditches are determined to be under the jurisdiction of one or more of these agencies and are affected by project-related activities, then Mitigation Measures BIO-2 and BIO-3 will be required to reduce project impacts to less than significant.</p>
<p>MC-2.5 CEQA Notification: Continue to provide CEQA notifications to Navy Base Ventura County (NBVC) for review and comment on City discretionary land use actions to include, but not limited to, General/Specific Plan/Coastal Plan amendments, zone changes, tract or parcel, maps, and special use or coastal development permits.</p>	<p>The proposed project would include a City of Oxnard GPA and Pre-zone. A copy of the Notice of Availability (NOA) of a Draft EIR will be sent to NBVC to provide notification that the EIR is available for review and comment during the 45-day public review period.</p>
<p>MC-3.2 Vertical Obstructions: Ensure all new development within the City is developed in accordance with Federal Aviation Regulations (FAR) Part 77 that is generally concerned with any construction or alteration more than 200 feet above ground level.</p>	<p>As identified in Section 3.8 of this EIR, Mitigation Measure HAZ-5 was added to ensure compliance with FAR Part 77 requirements.</p>
<p>MC- 3.4 Reference the Navy's Military Influence Area Map: Refer to the Navy's Military Influence Map as it may be updated, to identify possible City actions in or near NBVC installations, operations areas, and/or on or along designated mobilization routes and consult with NBVC for their input.</p>	<p>The proposed project is not within a Military Influence Area as identified on the General Plan Military Influence Areas Map (City of Oxnard General Plan Figure 7-1).</p>

Note: Relevant key General Plan policies were identified based on Appendix B, Table 10, of the City of Oxnard CEQA Guidelines.

As identified in Table 3-19, the proposed project would be generally consistent with the General Plan policies and project land use impact is considered less than significant.

Airport Comprehensive Land Use Plan (CLUP) for Ventura County

The Ventura County Transportation Commission (VCTC) acts as the Airport Land Use Commission (ALUC) in Ventura County. The ALUC has an *Airport Comprehensive Land Use Plan (CLUP) for Ventura County* that is

intended to protect and promote the safety and welfare of residents near the military and public use airports in the County, as well as airport users, while promoting the continued operation of those airports. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace (Coffman 2000).

The CLUP is divided into six chapters. Chapter One introduces the background, purpose and scope, legal authority, responsibilities of Airport Land Use Commission, and plan. Chapters Two through Five examine each of four Ventura County airports. Oxnard Airport is studied in Chapter Three. Chapter Six presents general noise and safety compatibility standards for all Ventura County airports. The CLUP states “Land use and density criteria contained in these guidelines were developed to reduce the risk from an off-airport aircraft accident to an acceptable level” (Heliplanners 2017).

Several “safety zones” surrounding civilian airports in Ventura County are defined in Chapter Six of the CLUP. These zones are established to provide a method of assessing the compatibility of various types of land uses with respect to aircraft operations. The three classifications are the “Runway Protection Zone,” the “Outer Safety Zone” and the “Traffic Pattern Zone” (TPZ). The runway protection and outer safety zones lie beneath the approach surfaces and do not affect the proposed project. The project site lies entirely within the (TPZ). The TPZ is the least restrictive of the three zones, and is described in the 1991 CLUP as “the area beneath the most commonly used traffic pattern” (Heliplanners 2017).

The CLUP states that within the TPZ “frequent low altitude overflights can be expected”. Most flights should follow the “typical flight path”, to the north of the site (As depicted on Exhibit 1, in Appendix I). However, those flights may still pose some risk and/or noise disturbance to the project site. Pilots flying a particularly tight traffic pattern may directly overfly the site.

The adopted land use compatibility standards related to aircraft noise for Ventura County airports is identified in Table 6B of the CLUP that establishes acceptable, conditionally acceptable, and unacceptable noise levels for various land uses around Ventura County Airports. The noise levels studied range from 60-80+ CNEL Range (dB) in increments of five. The project site lies outside the 60 dB noise contour around Oxnard Airport, and would therefore be exempt from the noise compatibility standards given in the CLUP (Heliplanners 2017).

Studies from both the Federal Interagency committee on Urban Noise, and the California Noise Compatibility Regulations and Guidelines (CNCRGs), considered in the CLUP, found the significant noise threshold for schools to be at 65 CNEL. However, the CNCRGs stipulates that schools “are compatible if they have been insulated to assure an interior sound level from aircraft noise of 45 CNEL”, or, if “an aviation easement over the property has been obtained by the airport owner” (Heliplanners 2017). The classrooms for the proposed project would be designed and constructed to have a CNEL of 45 dB or less.

The CLUP adopted land use compatibility standards in safety zones for civilian airports (Table 6B), establishes land uses within each of the three safety zones at Oxnard Airport. Each land use is classified as acceptable, conditionally acceptable, or unacceptable. Schools, under the subcategory of Public/Institutional land uses, are classified as “Unacceptable” within the TPZ.

In a letter dated July 23, 2014, Darren Kettle, Executive Director of VCTC, indicates “*In consideration of their safety, the adopted CLUP attempts to limit large congregations of people in the TPZ and specifically identifies schools as an unacceptable use within the TPZ. The proposed project as defined would be inconsistent with the adopted CLUP.*”

Table A10 of the CLUP, “Suggested Safety Compatibility Criteria” by the State of California recommends developers “avoid” schools within the TPZ. More specifically, due to the propensity for “low altitude overflight”, schools and activities with “more than 150 people per acre should be avoided...unless no other feasible alternatives are available”. Criteria for how extensive the search for “other feasible alternatives” are not given and therefore would be at the discretion of local jurisdictions (Heliplanners 2017).

The California Airport Land Use Planning Handbook discourages schools within the TPZ, but does not prohibit them. The handbook's recommendations within specific zones are not meant to override local ALUC findings (Heliplanners 2017).

As required by Public Utilities Code Section 21675, the proposed project would be submitted to the ALUC for review. If the commission determines that the proposed project is inconsistent with the CLUP, OSD would be notified. OSD after a public hearing, can propose to overrule the commission by a two-thirds vote if it makes specific findings that the proposed project is consistent with the purpose of this article. Therefore, in order to be constructed, the proposed project would require either a finding of consistency by the ALUC with the CLUP or OSD would need to overrule the commission by a two-thirds vote with applicable findings.

LAFCo

The proposed project would require annexation into the City of Oxnard. Annexation of the project area to the City would require LAFCo approval of several changes of organization, collectively called reorganization. The following LAFCo actions would be necessary components of the reorganization:

- Annexation to the City of Oxnard
- Annexation to the Calleguas Municipal Water District
- Annexation into Metropolitan Water District of Southern California
- Detachment from Oxnard Drainage District 1
- Detachment from the Ventura County Resource Conservation District
- Detachment from the Ventura County Fire Protection District
- Detachment from Ventura County Service Area No. 32
- Detachment from Ventura County Service Area No. 33

As part of the reorganization process, sphere of influence amendments will also be needed. Anticipated amendments include the following:

- Amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and Agricultural land to the west
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed project will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services. Discussion of project consistency with relevant LAFCo Policies is provided below in Table 3-20.

Table 3-20. LAFCo Consistency Analysis

Policy	Discussion
<i>Ventura LAFCo Commissioners Handbook</i>	
<i>Specific Policies</i>	
<p><u>Section 3.2.2 Annexation to the City of Oxnard and Calleguas Municipal Water District.</u> Any annexation to the City of Oxnard shall only be considered and approved if the subject territory is already within the Calleguas Municipal Water District, or is approved concurrently with an annexation to the Calleguas Municipal Water District, unless it is clearly demonstrated that the subject territory has no foreseeable need for potable water service.</p>	<p>The proposed project is located within the SOI of the City of Oxnard and annexation to the City of Oxnard and Calleguas Municipal Water District is proposed to occur concurrently as part of the project.</p>
<p><u>Section 3.2.4.1 Consistency with General and Specific Plans:</u> LAFCo shall consider consistency with city and/or county general and specific plans. Unless exceptional circumstances are shown, LAFCo will not approve a proposal unless it is consistent with the applicable general plan and any applicable specific plan.</p>	<p>The District would process a General Plan Amendment (GPA), Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is Community Reserve (C-R). With the approval of the GPA, Pre-Zone, and Annexation, the proposed project would be consistent with the General Plan and zoning land use designations.</p>
<p><u>Section 3.2.4.4 Greenbelts:</u> The County of Ventura and various cities in the County have adopted Greenbelt Agreements for the purposes of preserving agriculture and/or open space, providing separation between cities, and/or limiting the extension of urban services. The Ventura LAFCo is not a direct party to these Greenbelt Agreements, but has endorsed them as statements of local policy. As such, LAFCo will not approve a proposal from a city that is in conflict with any Greenbelt Agreement unless exceptional circumstances are shown to exist. LAFCo encourages that Greenbelt Agreements be amended by all parties involved prior to the filing of any proposal that may be in conflict with the Agreements.</p>	<p>The City of Oxnard is a participant in the following two greenbelt agreements, the Oxnard-Camarillo Greenbelt Agreement and the Ventura-Oxnard Greenbelt Agreement (City of Oxnard 2006). The proposed project site is located outside of either of these greenbelts but is located immediately adjacent to the east boundary of the Ventura-Oxnard Greenbelt. Road and infrastructure improvements within Greenbelt Agreement areas have historically not been considered “development” nor subjected to Greenbelt Agreement policies. Also, the Greenbelt Agreement expressly allows “land uses that are consistent with the general plan”. The proposed improvements to adjacent roadways such as Patterson Road, Doris Avenue, and/or Teal Club Avenue are all consistent with the City of Oxnard’s adopted general plan and therefore allowed within the Ventura-Oxnard Greenbelt area near the site (Stephens County of Ventura 2017).</p>
<i>General Standards for Annexation to Cities and Districts</i>	
<u>Section 3.3.1.1 Factors Favorable for Approval:</u>	
<p>a) The proposal would eliminate islands, corridors, or other distortion of existing boundaries.</p>	<p>The proposed project would not eliminate islands, corridors, or other distortion of existing boundaries. However, the project site is located within the City of Oxnard SOI and development of the area was accounted for in the City’s 2030 General Plan.</p>
<p>b) The affected territory is urban in character or urban development is imminent, requiring municipal or urban-type services.</p>	<p>The proposed project is located within the City of Oxnard SOI and development of the area with urban uses was accounted for in the City’s 2030 General Plan. The project site is adjacent to an existing residential neighborhood to the north with additional urban areas located nearby to the east and south. A separate proposed project, called the Teal Club Specific Plan, has a different development scenario for the project site and proposes to develop land adjacent to the project site to the east and south with a variety of urban land uses.</p>
<p>c) The affected territory can be provided all urban services by the city or district as shown by the city’s or district’s service plans and the proposal would enhance the efficient provision of urban services.</p>	<p>The project site is located within the City of Oxnard SOI and development of the area with urban services was accounted for in the 2030 General Plan.</p>

Table 3-20 (Continued). LAFCo Consistency Analysis

Policy	Discussion
d) The proposal is consistent with state law, adopted spheres of influence, applicable general and specific plans, and these policies.	The project site is located within the City of Oxnard SOI and development of the area was accounted for in the 2030 General Plan. With approval of the proposed GPA the proposed project would be consistent with the General Plan land use designation.
e) The proposal is for the annexation of city or district owned property, used or to be used for public purposes.	The proposed project would be public school facilities to meet the educational needs of District students.
<u>Section 3.3.1.2 Factors Unfavorable to Approval:</u>	
a) The proposal would create or result in corridors, peninsulas, or flags of city or district area or would otherwise cause or further the distortion of existing boundaries.	The proposed project would not cause distortion of existing boundaries. The proposed project is located within the City of Oxnard SOI and development of the area with urban uses was accounted for in the City's 2030 General Plan.
b) The proposal would result in a premature intrusion of urbanization into a predominantly agricultural or rural area.	The proposed project would not result in premature intrusion of urbanization. The proposed project would convert existing agricultural lands to educational uses. However, the proposed project is located within the City of Oxnard SOI and development of the area with urban uses was accounted for in the City's 2030 General Plan. Land to the west of the project site across Doris Avenue is part of the Ventura-Oxnard Greenbelt and would remain in agricultural use. Land to the north of the project site is developed with an existing residential neighborhood.
c) The proposal is inconsistent with state law, adopted spheres of influence, adopted general or specific plans, adopted habitat conservation and/or restoration plans, other applicable plans adopted by any governmental agency, or these policies.	The proposed project is located within the City of Oxnard SOI and would be consistent with the General Plan with approval of the GPA. As identified in Appendix A, the proposed project would not conflict with an adopted habitat conservation or restoration plan.
d) For reasons of topography, distance, natural boundaries, or like considerations, the extension of services would be financially infeasible, or another means of supplying services by acceptable alternatives is preferable.	Extension of services is anticipated to be financially feasible. The proposed project is located within City of Oxnard SOI and development of the area with urban uses was accounted for in the City's 2030 General Plan.
e) Annexation would encourage a type of development in an area that due to terrain, isolation, or other economic or social reason, is not in the public interest.	The proposed project would be developed in an area adjacent to an existing residential neighborhood and includes public schools to serve students within the OSD.
f) The proposal appears to be motivated by inter-agency rivalry or other motives not in the public interest.	OSD is proposing new educational facilities to meet the current and anticipated future enrollment demand. New public schools are typically considered a public benefit.
g) The proposed boundaries do not include logical service areas or are otherwise improperly drawn.	The proposed project is located within City of Oxnard SOI and development of the area with urban uses was accounted for in the City's 2030 General Plan.
h) The proposal area would accommodate new development and includes a tsunami inundation zone, wildfire hazard zone, FEMA designated floodway or floodplain, or other hazardous area designated by federal, state or local public agencies, unless the Commission determines that the hazard or hazards can be adequately mitigated.	The proposed project is not located within a tsunami inundation zone, wildfire hazard zone, or 100-year floodplain.
i) The proposal will result in an unacceptable significant adverse impact(s) to the environment as determined by the Commission.	Potential impacts associated with construction and operation of the proposed project are evaluated in this EIR. When warranted and feasible, mitigation measures are identified to reduce project impacts. Impacts found to be significant and unavoidable in this EIR include agricultural conversion (project level and cumulative) and airport hazards. As a responsible agency, LAFCo will evaluate if potential impacts associated with the proposed project would be acceptable or not when making their decisions.

Table 3-20 (Continued). LAFCo Consistency Analysis

Policy	Discussion
<i>Agriculture and Open Space Preservation</i>	
<p><u>3.3.5.1: Findings and Criteria for Prime Agricultural and Existing Open Space Land Conversion:</u> LAFCo will approve a proposal for a change of organization or reorganization which is likely to result in the conversion of prime agricultural or existing open space land use to other uses only if the Commission finds that the proposal will lead to planned, orderly, and efficient development. For the purposes of this policy, a proposal for a change of organization or reorganization leads to planned, orderly, and efficient development only if all of the following criteria are met:</p> <p>a) The territory involved is contiguous to either lands developed with an urban use or lands which have received all discretionary approvals for urban development.</p> <p>b) The territory is likely to be developed within 5 years and has been pre-zoned for non-agricultural or open space use. In the case of very large developments, annexation should be phased wherever possible.</p> <p>c) Insufficient non-prime agricultural or vacant land exists within the existing boundaries of the agency that is planned and developable for the same general type of use.</p> <p>d) The territory involved is not subject to voter approval for the extension of services or for changing general plan land use designations. Where such voter approval is required by local ordinance, such voter approval must be obtained prior to LAFCo action on any proposal unless exceptional circumstances are shown to exist.</p> <p>e) The proposal will have no significant adverse effects on the physical and economic integrity of other prime agricultural or existing open space lands.</p>	<p>a) The proposed project is adjacent to existing urban uses to the north of the project site.</p> <p>b) The project site is located within the City of Oxnard SOI and development of the area was accounted for in City's 2030 General Plan. Separate from the proposed project, the proposed Teal Club Specific Plan would develop land within the City's SOI adjacent to the project site to the east and south with a variety of urban uses if approved.</p> <p>c) The District evaluated several potential school sites (Appendix B) and other alternatives and determined that the proposed site at the corner of Doris Avenue and Patterson Road to be the one that is best available.</p> <p>d) The project site is located within the City of Oxnard's SOI and City Urban Restriction Boundary (CURB). The territory involved is not subject to voter approval for the extension of services or for changing general plan land use designations. Road and infrastructure improvements within Greenbelt Agreement areas have historically not been considered "development" nor subjected to Greenbelt Agreement policies. Also, the Greenbelt Agreement expressly allows "land uses that are consistent with the general plan". The proposed improvements to adjacent roadways such as Patterson Road, Doris Avenue, and/or Teal Club Avenue are all consistent with the City of Oxnard's adopted general plan and therefore allowed within the Ventura-Oxnard Greenbelt area near the site (Stephens 2017).</p> <p>e) Please refer to the agricultural discussion in Section 3.2 of this EIR for an evaluation of potential impacts related to agricultural resources.</p>

As identified in Table 3-20, the proposed project is generally consistent with LAFCo policies and project land use impact would be considered less than significant.

3.10.2.4 Cumulative Impacts

The proposed project, and future projects, would be required to comply with applicable land use regulations in order to be granted needed discretionary land use approvals for construction and operation. The project site is located within an area that was planned for future development in the City of Oxnard 2030 General Plan and within the CURB. The proposed project is a similar use to what was proposed in the 2030 General Plan and includes the necessary land use actions as part of the project to bring the project in compliance with City of Oxnard General Plan and zoning land use designations. Aside from the impacts associated with agricultural conversion addressed in Section 3.2 of this EIR, project contribution to a cumulative land use impact would thereby be considered less than significant.

3.10.2.5 Level of Impact After Mitigation

Less Than Significant Impact.

3.11 NOISE

This section provides an analysis of the potential noise impacts associated with the construction and operation of the proposed project. This analysis describes the existing and proposed conditions of noise in the study area, evaluates the relevant components and characteristics, and assesses the impacts that have the potential to occur as a result of the project.

3.11.1 Environmental Setting

3.11.1.1 Existing Conditions

The existing noise environment consists of vehicle noise from local street traffic on Doris Avenue, North Patterson Road, nature sounds, and community sounds. Agriculture land use is located south of the project site and west across North Patterson Road. Single family homes are located to north of the project site across Doris Avenue. The Oxnard Airport is located approximately 0.3 miles south of the project site. No ambient noise monitoring data have been identified for the project vicinity, but existing land use patterns and street patterns as well as the existing noise contours published in the City of Oxnard's Noise Element indicate that the existing ambient noise levels at the proposed project site should be at or below 65 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL).

3.11.1.2 Regulatory Setting

Federal Regulatory Setting

U.S. Environmental Protection Agency. The USEPA (USEPA 1974) has developed and published criteria for environmental noise levels with a directive to protect public health and welfare with an adequate margin of safety. This USEPA criterion (Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety) was developed to be used as an acceptable guideline when no other local, county, or State standard has been established. However, the USEPA criterion is not meant to substitute for agency regulations or standards in cases where States and localities have developed criteria according to their individual needs and situations.

Federal Transit Administration (FTA). The FTA has developed vibration impact thresholds for noise-sensitive buildings, residences, and institutional land uses. These thresholds are 80 vibration velocity level (VdB) at residences and buildings where people normally sleep (e.g., nearby residences and daycare facilities) and 83 VdB at institutional buildings (e.g., schools and churches). These thresholds apply to conditions where there are an infrequent number of events per day. Although established for transportation-related activities, these thresholds are widely used to evaluate the significance

State Regulatory Setting

The State of California. Office of Noise Control Standards has also developed land use compatibility guidelines for community noise (California Office of Noise Control 1976). Following these guidelines, establishing residences, churches, libraries, hospitals, and schools in areas exceeding 70 dB CNEL is normally unacceptable. These facilities are conditionally acceptable in areas that measure between 60 and 70 dB CNEL. Professional and commercial office buildings are normally unacceptable in areas exceeding 75 dB CNEL, and are conditionally acceptable in areas that measure between 67 dB and 77 dB CNEL. These guidelines, however, can be modified to reflect sensitivities of individual communities to noise.

Local Regulatory Setting

The City of Oxnard Noise Element. The City of Oxnard Noise Element to the General Plan identifies the land use compatibility standard for noise-sensitive land uses as a CNEL of 55 dBA to 70 dBA as conditionally acceptable. The Noise Element has identified mutually compatible goals, objectives, and policies that provide a general framework for future efforts to achieve a quiet environment. These goals, objectives and policies listed in the Noise Element are provided below:

- Goals
 - A quiet environment for residents of Oxnard.
- Objectives
 - Provide acceptable noise levels for residential and other noise-sensitive land uses consistent with State guidelines.
 - Protect noise-sensitive uses from areas with high ambient noise levels.
 - Integrate noise considerations into the community planning process to prevent noise/land use conflicts.
- Policies
 - The City should encourage land uses that are not noise sensitive in areas that are permanently committed to noise producing land uses, such as transportation corridors.
 - The City should promote maximum efficiency in noise abatement efforts through intergovernmental coordination and public information programs.
 - Educational institutions should be located in areas where students and teachers can perform without distraction from noise.
 - The City shall promote, where feasible, alternative sound attenuation measures other than the traditional wall barrier.
 - Municipal policies shall be consistent with the Ventura County Airport Land Use Commission's adopted land use plan.
 - Proposed development projects shall not generate more noise than that classified as "satisfactory", as determined by noise compatibility standards, on nearby property. Project applicants shall reduce or buffer the noise generated by their projects.
 - The City shall prohibit the development of noise-sensitive land uses within the Oxnard Airport 65 dB(A) CNEL contour.
 - The City shall continue to enforce State Noise Insulation Standards for proposed projects in suspected high noise environments. The Planning Division shall notify prospective developers that, as a condition of permit issuance, they must comply with noise mitigation measures, which designed by an acoustical engineer. No building permits will be issued without City staff approval of the acoustical report/design.
 - The City shall establish noise referral zones along existing or proposed major transportation routes. Proposed development within these zones should be evaluated for noise impacts.
 - Preparation of the Ormond Beach Specific Plan shall include acoustical analysis to determine potential impacts from Point Mugu Naval Air Station and Air National Guard facility.
 - Noise contour maps and tables shall be utilized as a guide to future land use decisions.

City of Oxnard Code of Ordinances. The City of Oxnard's Code of Ordinances Chapter 7 Section 7-185 limits noise propagation to residential land uses from stationary equipment during the daytime period (7:00 AM to 10:00 PM) to 55 dBA equivalent continuous sound level (Leq) and during the nighttime period (10:00 PM to 7:00 AM) to 50 dBA Leq.

3.11.2 Impact Analysis

3.11.2.1 Methodology

To determine potential noise effects of the Proposed Project during the construction and daily operations of the facility, a noise model was constructed to evaluate the effects of the Proposed Project related noise sources on the environment. Modeling of the project site and surrounding environment was accomplished using Cadna (Computer Aided Noise Abatement), which is a model-based computer program developed for predicting noise impacts in a wide variety of conditions. Cadna allows for the input of project information such as noise source data, barriers, structures, and topography to create a detailed CAD model, and uses the most up-to-date calculation standards to predict outdoor noise impacts to property lines and adjacent surrounding areas.

3.11.2.2 Significance Thresholds

The thresholds for noise resource impacts used in this analysis are consistent with Appendix G of the CEQA Guidelines and the City of Oxnard's CEQA Guidelines.

- *Would the project expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?*
- *Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?*
- *Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*
- *Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*
- *Would the project be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?*
- *Would the project expose non-human species to excessive noise?*

3.11.2.3 Project Impacts

Would the project expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?

Less Than Significant Impact. The City of Oxnard General Plan Noise Element identifies land use compatibility standard for noise-sensitive land uses as a CNEL of 55 dBA to 70 dBA as conditionally acceptable. No ambient noise monitoring data have been identified for the Project vicinity, but existing land use patterns and street patterns indicate within the City of Oxnard's Noise Element that the existing ambient noise levels should be below the CNEL standard of 65 dBA at the project site and adjacent properties. The construction of the proposed school site would have only a minimal impact on daily traffic volumes in the project vicinity, and thus would have minimal impact on traffic noise conditions.

The City of Oxnard's Code of Ordinances Chapter 7 Section 7-185 limits noise propagation to residential land uses from stationary equipment during the daytime period (7:00 AM to 10:00 PM) to 55 dBA Leq and during the nighttime period (10:00 PM to 7:00 AM) to 50 dBA Leq. The Project consists of the construction and operation of a new elementary, middle school, and District administrative center on a 25 acre site. This proposed facility will include twelve new buildings, which include rooftop HVAC units. The classrooms would be designed and constructed to have a Community Noise Equivalent Level of 45 dB or less.

The HVAC units will be surrounded by a parapet wall. According to the manufacturers, the sound power levels for the packaged air conditioning units are 89 dBA. Given the elevated rooftop height for the mechanical equipment and assuming the rooftop mechanical equipment operates simultaneously, the noise levels from the operation of all the rooftop mechanical equipment would range from 46 dBA Leq at the single family residential homes located

to the northwest near the intersection of Doris Avenue and Patterson Avenue, to 49 dBA Leq at the single family residential homes located directly north across Doris Avenue. Existing classrooms are located directly north adjacent to the proposed classroom building. The noise levels generated by the proposed Project will comply with the City of Oxnard's General Plan and Code of Ordinances. Therefore, project impact is less than significant.

Would the project expose persons to or generate excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Operation of the school would not generate vibration; however, construction of the classroom buildings and site grading as well as infrastructure improvements and utility connections would require the use of equipment that could generate vibration. Possible sources of vibration may include bulldozers, dump trucks, backhoes, rollers, and other construction equipment that produces vibration. No blasting will be required at the project site.

Project construction activities would occur within approximately 50 feet from the nearest signal family residence. According to FTA guidelines, a vibration level of 78 VdB (Vibration Velocity Level) is the threshold of perceptibility for humans. For a significant impact to occur, vibration levels must exceed 80 VdB during infrequent events (Federal Transit Administration 1995). Based on the levels published by the FTA (Federal Transit Administration 2006) and the type of equipment proposed for use at the proposed Project, coupled with the distance to the existing identified noise sensitive receptors, analysis shows that the vibration levels maybe perceptible at the nearest sensitive receptors, but will be below the maximum vibration level of 80 VdB. This vibration level is considered acceptable for impacts to sensitive receptors. Therefore, project impact is less than significant impact.

Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. The dominant noise sources in the vicinity of the proposed Project site is traffic noise associated with Doris Avenue and North Patterson Road. Based on existing traffic volumes, noise impacts to adjacent residences range from 57 dBA CNEL to 64 dBA CNEL. The Project would result in an increase in traffic along Doris Avenue and North Patterson Road during the arrival and departure of students. The Project traffic analysis identifies an increase of 3,600 Average Daily Trips (ADT). Doris Avenue ADT will increase with 53% (1,900 ADT) of the Project-related ADT, and North Patterson Road ADT will increase with 47% (1,700 ADT) of the Project-related ADT. This increase in ADT represents an increase of less than 2 dBA at the residences adjacent to the proposed project. According to the CEQA guidelines, an increase in the overall ambient community noise level of less than 2 dBA is considered to be a less than significant impact.

The Project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the Project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 169 based aircraft and approximately 74,157 operations for calendar year 2016 (Ventura County 2017). The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site is located just outside of the 60 dBA CNEL contour. Therefore, the noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and with typical educational facility construction with windows closed, interior noise levels from aircraft operations are expected to achieve 45 dBA CNEL or less, which achieves both the State and City interior noise requirements. Therefore, noise impacts from the Oxnard Airport are considered to be less than significant.

This proposed facility will include twelve new buildings, which include rooftop heating, ventilation, and air conditioning (HVAC) units. The HVAC units will be surrounded by a parapet wall. The noise levels from the operation of all the rooftop mechanical equipment would range from 46 dBA Leq at the single family residential homes located to the northwest near the intersection of Doris Avenue and Patterson Avenue, to 49 dBA Leq at the single family residential homes located directly north across Doris Avenue. Based on the existing noise levels generated by vehicle traffic, the noise impacts from the rooftop mechanical equipment would result in an increase of less than 1 dBA to the ambient noise levels at the adjacent residential property lines. Since the proposed

Project is shown to only increase the overall ambient community noise level by less than one dBA, project impact would be less than significant impact.

Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant With Mitigation. Construction of the proposed K-5 and 6-8 schools are planned to start in 2019. All project construction activities including those for the Administrative Facilities are anticipated to be completed by the start of the 2021-2022 school year. The Project construction activities are anticipated to occur in phases and include site preparation, grading, building construction, paving, architectural coating, and landscaping. These construction activities would require a variety of equipment. Typical construction equipment would not be expected to generate noise levels above 90 dBA at 50 feet, and most equipment types would typically generate noise levels of less than 85 dBA at 50 feet.

The highest noise levels during construction are normally generated during site grading and foundation work. Grading equipment would be the loudest equipment used at the site. This equipment is expected to generate a maximum instantaneous noise level (L_{max}) of up to 75 - 80 dBA at the single family homes located at a distance of 100 feet. This would be loud enough to temporarily interfere with speech communication outdoors and indoors with the windows open. Project construction would occur between the hours of 7:00 AM and 3:30 PM, Monday through Friday. Project construction will also implement standard noise reduction measures. Due to the infrequent nature of loud construction activities at the site, the limited hours of construction, and the implementation of Mitigation Measure N-1, the temporary increase in noise due to construction is considered to be a less than significant impact.

Infrastructure improvements and utility connections are expected to occur as part of the proposed project. These include roadway improvements and site required utility connections. Roadway improvements include the widening of both Doris Avenue and Patterson Road as well as traffic signing and striping. Electrical and water lines are located on the south side of Doris Avenue and sewer lines are located down the center of Patterson Road. The final locations of the utility connections were not known at the time of this study. However, construction for both the roadway improvements and utility connections are expected to occur on the south portion of Doris Avenue and along Patterson Road south of Doris Avenue. These construction operations could occur within 50 feet of single family residential home and could result in noise levels (L_{max}) of up to 80 - 85 dBA. These construction operations would incorporate Mitigation Measure N-1 to reduce the construction noise levels. Therefore, the increase in noise due to the infrastructure and utility related activities is considered to be less than significant.

Would the project be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

Less Than Significant Impact. The Project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the Project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 169 based aircraft and approximately 74,157 operations for calendar year 2016 (Ventura County 2017). The Oxnard Airport Noise Contour map within the City of Oxnard Noise Element to the General Plan shows that the project site is just outside of the 60 dBA CNEL contour. The noise impact levels from the Oxnard Airport to the project site will be below 60 dBA CNEL and is consider acceptable for the proposed land use based on the land use compatibility within the City of Oxnard General Plan Noise Element. Therefore, noise impacts from the Oxnard Airport are considered less than significant.

Would the project expose non-human species to excessive noise?

No Impact. As indicated in section 3.4, Biological Resources, no candidate, sensitive, or special-status wildlife or plant species in any local or regional plans, policies, or regulations, or regulated by the CDFW or USFWS were observed during the site visit in July 2017. Additionally, no suitable habitat for these species was found within or

directly adjacent to the project site. Therefore, the proposed project would not expose non-human species to excessive noise levels.

3.11.2.4 Cumulative Impacts

Cumulative projects include the effects of existing, current, and reasonably foreseeable future projects. The reasonably foreseeable future projects within the vicinity of the proposed project include the Teal Club Specific Plan. Buildout of the City's SOI area including the project site, was accounted for in the City's 2030 General Plan Program EIR (SCH 2007041024) that concluded that General Plan buildout could result in some noise related impacts that would be significant and unavoidable (Oxnard 2009). These impacts include exposing a variety of noise sensitive land uses to traffic noise, railroad noise, and/or excessive groundborne vibration or groundborne noise levels. The 2030 General Plan EIR also concluded that other potential noise impacts could be mitigated through the implementation of regulatory controls and measures present in the City Noise Ordinance and other policies (Oxnard 2017). The proposed project is a similar land use development scenario to what was anticipated in the 2030 General Plan under buildout conditions for the project site. As noted above, the proposed Project is shown to only increase the overall ambient community noise level by less than two dBA and would not generate or expose persons to excessive groundborne vibration or groundborne noise. Therefore, project cumulative impact would be less than significant.

3.11.2.5 Mitigation Measures

N-1: Construction noise levels fluctuate depending on the construction phase, equipment type and duration of use; distance between noise source and sensitive receptor; and the presence or absence of barriers between noise source and receptors. Therefore, the Project proponent should require construction contractors to limit standard construction activities as follows:

- Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. In addition, the time allowed for equipment and trucks to idle will be limited to the extent practicable.
- Stationary noise sources shall be located as far from adjacent receptors as possible and shall be muffled and enclosed within temporary sheds, incorporate insulation barriers or other measures to the extent feasible.
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible. This could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drilling rather than impact equipment whenever feasible.
- Heavy construction equipment operations should be limited during the school period when classrooms are being utilized in the adjacent building.
- When heavy construction activities are located within 75 feet of a residential structure deploy a temporary portable sound barrier between the construction activities and nearest sensitive receptor.

3.11.2.6 Level of Impact After Mitigation

With the implementation of Mitigation Measure N-1, project impact would be less than significant.

3.12 POPULATION

This section evaluates the proposed project's potential impacts to population.

3.12.1 Environmental Setting

3.12.1.1 Existing Conditions

As of the census in 2010, the City of Oxnard had a population of 197,899 and was determined to be the 21st largest city within California (City of Oxnard 2011). Table 3-21 provides the population estimates of population and households for the City of Oxnard and Ventura County for 2016-2017. Overall, the City of Oxnard makes up about 24% of the countywide population of 857,386 (State of California Finance Department of Finance 2017). Between 2016 and 2017, population in Ventura County increased by an estimated 0.4%. Population in the City of Oxnard increased by 0.5%.

Table 3-21. Population Estimates for Ventura County and the City of Oxnard, 2016-2017

	Total Population		Percent Change
	1/1/2016	1/1/2017	
Ventura	853,893	857,386	0.4 increase
Oxnard	206,754	207,772	0.5 increase

Source: State of California Finance Department of Finance 2017

Table 3-22 shows projections for population and household growth in the City of Oxnard through 2040 based on 2012 data. The City of Oxnard is estimated to grow by approximately 16% by 2040.

Table 3-22. Population Projections through 2040 for the City of Oxnard

	2012	2040	Difference (2012-2040)
Population	200,100	237,300	16% increase
Households	50,100	60,100	16% increase

Source: Southern California Association of Governments (SCAG), 2015.

3.12.1.2 Regulatory Setting

The City of Oxnard 2030 General Plan Goals and Polices for CD Growth Management for public facility service areas and ICS Education most relevant to the proposed project are provided herein.

Goal CD 8-8: Public Facility Service Areas. Provide appropriate service areas for existing and planning public facilities such as museum, secondary and elementary schools, fire stations, branch libraries, community centers, parks, and infrastructure utility for supporting facilities.

Goal ICS-21.1: Accommodating Growth. In coordination with the local school districts, designate sites for new school facilities in order to ensure that the number, type and location of school facilities are commensurate with growth.

3.12.2 Impact Analysis

3.12.2.1 Methodology

The assessment of the potential for the project to induce substantial growth indirectly as a result of construction of the project was evaluated using current population data and project growth for the City of Oxnard.

3.12.2.2 Significance Thresholds

Impacts to population are generally social or economic in nature. Under CEQA, a social or economic change is not considered a significant effect on the environment unless the change can be directly or indirectly linked to a physical change. Population impacts would therefore be considered potentially significant if growth associated with the proposed project would exceed SCAG growth projections for the area and if an exceedance would have the potential to create a significant physical change to the environment. The threshold for population impacts used in this analysis is consistent with Appendix G of the CEQA Guidelines.

- *Would the project Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?*

3.12.2.3 Project Impacts

Would the project Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The City of Oxnard has identified the requirement for identifying public facility service areas for existing and planned schools (City of Oxnard 2011). The construction and operation of the educational facilities is not a housing project. The project would generate a minor number of jobs that may be filled by the existing labor pool or from outside sources. The student population would be part of the existing and projected growth for the city. In general, K-12 schools accommodate growth as a result of other land use decisions in the City such as the construction of new homes.

The project site is within the City of Oxnard SOI and is adjacent to a fully developed residential development to the north. Buildout of this SOI was accounted for in the City's 2030 General Plan. The school facilities would require utility improvements to connect the site as well as internal improvements. As these facilities would accommodate existing and projected growth and the requirement for local schools, an indirect impact related to growth inducement would not occur. Therefore, project impact would be less than significant.

3.12.2.4 Cumulative Impacts

The proposed project would not add a substantial number of new jobs. The students and staff attending the school facilities are included in existing and forecasted population growth for the City of Oxnard. The proposed project would support existing and future students and infrastructure improvements would not indirectly cause an increase in population growth. Therefore, project contribution for a cumulative impact would be less than significant.

3.12.2.5 Mitigation Measures

No Mitigation Measures are required.

3.12.2.6 Level of Impact After Mitigation

No Mitigation Measures are required; project impact would be less than significant.

3.13 PUBLIC SERVICES

This section evaluates the proposed project's potential impacts to fire and police protection services.

3.13.1 Environmental Setting

3.13.1.1 Existing Conditions

Fire Protection

The Oxnard Fire Department provides a full range of emergency and non-emergency services to the community and is staffed by approximately 93 sworn and 10 civilian employees. (OFD 2017). The majority of the safety positions are assigned to the Suppression Division that provides emergency services for City residents. The mission of the Oxnard Fire Department is to serve the public and safeguard the community by preventing or minimizing the impact of emergency situations to life, the environment, and property by responding to both emergency and non-emergency calls for service (City of Oxnard 2011). In 2017, the Oxnard Fire Department responded to 8,000 incidents and 10,000 individual unit responses. There are eight Fire Stations in the City of Oxnard and the nearest Fire Station to the project site is Station 1 (City of Oxnard 2017). Based on an interview with Assistant Chief Alex Hamilton, Station 1 and Station 4 would provide emergency and non-emergency services to the project site (Oxnard Fire Department 2017). The location of Fire Stations within the City and the approximate distance of the stations to the project site are identified in Table 3-23.

Table 3-23. Fire Station Locations

Station Number	Address	Approximate Driving Distance to Project Site
1	491 South "K" Street, Oxnard, CA 93030	1.7 miles
2	531 East Pleasant Valley Road, Oxnard, CA 93030	5.7 miles
3	150 Hill Street, Oxnard, CA 93030	3.2 miles
4	230 West Vineyard Avenue, Oxnard, CA 93030	3.2 miles
5	1450 Colonia Road, Oxnard, CA 93030	2.7 miles
6	2601 Peninsula Road, Oxnard, CA 93030	3.2 miles
7	3300 Turnout Park Circle, Oxnard, CA 93036	4.9 miles
8	3000 South Rose Avenue, Oxnard, CA 93033	4.6 miles

(Source: Distances estimated utilizing Google Earth from the Station-site to the corner of Doris Avenue and Patterson Road).

Police Protection

The Oxnard Police Department provides police protection services to the City of Oxnard. The Oxnard Police Department employs approximately 249 sworn officers and 123 civilian support personnel under the leadership of Chief of Police Scott Whitney (OPD 2017).

The Department promotes a community-based policing philosophy, and has embraced prevention and intervention strategies in policing the city. There are five police officers that work hand-in-hand with the city's schools offering assistance to teachers and students alike providing a positive police presence on campus. The Department has the county's first Police Activities League program, a highly successful effort aimed at preteen youth in Oxnard who are in need of some positive interaction with an adult role model. Other community programs started by the Department include two police storefronts and several drop-in centers. Department personnel and a host of volunteers staff these storefronts and drop-in centers. Police services are provided to residents in their own areas through the storefronts rather than requiring the residents coming to the police station (OPD 2017).

The Department takes pride in the methods used to communicate with its residents. A weekly crime prevention television program titled *StreetBeat* keeps residents informed about crime in the city and offers crime prevention measures that can be used by all Oxnard residents. This television program has been replicated by more than 50 other police departments across the nation in recent years. A telemarketing computer was utilized to notify residents about crime patterns in their respective neighborhoods and the Department has established its own home page on the World Wide Web (OPD 2017).

As the City's population grows, service call demand increases. During 2013, police officers responded to over 100,000 calls for service. Oxnard Police Department maintained a response time to priority services calls that averaged under five minutes. This call category includes those calls that pose the greatest threat to life and safety, such as injury, traffic collisions, aggravated assaults, and in-progress crimes (OPD 2013). Recorded response times by the Oxnard Police Department by priority for 2015 and 2016 are provided in Table 3-24.

Table 3-24. Oxnard Response Time by Priority for 2015 and 2016

Priority Number	2015		2016	
	Call Count	Response Time (Non-Audited) (Minutes)	Call Count	Response Time (Non-Audited) (Minutes)
P1+	368	0:06:37	251	0:06:25
P1	41,176	0:08:39	33,806	0:17:41
P2	34,798	0:35:33	34,414	0:44:39
P3	33,063	1:12:53	32,034	1:05:19
P4	752	N/A	7,794	N/A
Total	110,154			

N/A: Not available

Source: City of Oxnard Public Records Act Request 17-253, received 09 November 2017

3.13.1.2 Regulatory Setting

Local

The City of Oxnard 2030 General Plan Goals and Policies for infrastructure and community services (ICS) for police and fire protection services most relevant to the proposed project are provided herein.

Goal ICS-19 Adequate and effective law enforcement and the incorporation of crime prevention features in development.

ICS-19.2 Police Review of Development Projects: Continue to require the Police Department to review proposed development projects and provide recommendations that enhance public safety.

ICS-19.4 Crime Prevention Device Requirements: Require crime prevention devices (e.g. deadbolt locks, peepholes, etc.) in all new development.

- ICS-19.5** Incorporating Security Design Principles: Encourage crime prevention and defensible space through design principles such as those employed through the National Crime Prevention through Environmental Design program, Neighborhood Watch Program, and/or other appropriate methods to enhance public safety.
- ICS-19.7** New Development: Require new development to fund a fair share extension of police services to maintain service standards, including personnel and capital improvement costs.
- ICS-19.8** Response Time: Achieve and maintain an average response time of five (5) minutes or less for priority one calls.
- Goal ICS-20** Protected public through effective fire prevention services and the incorporation of fire safety features in new development.
- ICS-20.1** Fire Response Time: Achieve and maintain a response time of five minutes 90% of the time as a goal for service call response and siting of new fire stations.
- ICS-20.5** Fire Services to New Development: require new development to fund a fair share extension of fire services to maintain service standards, including personnel and capital improvement costs.
- ICS-20.7** Adherence to City Standards: Ensure that water main size, water flow, fire hydrant spacing, and other fire facilities meet City standards.
- ICS-20.8** Development Review: review new development applications to assess potential impacts to existing fire protection services and the need for additional and expanded services.
- ICS-20.10** Adequate Emergency Access and Routes: Require that new development provide adequate access for emergency vehicles, particularly firefighting equipment, and evacuation routes, as appropriate.

3.13.2 Impact Analysis

3.13.2.1 Methodology

The City of Oxnard CEQA guidelines for public services that include fire protection/emergency medical response/law enforcement, provides for the use appropriate service generation factors or input from service providers to determine the anticipated demand of the project for these public services. For an analysis of project impact, a determination of whether the increase in demand is within the capabilities of existing facilities or whether new or expanded facilities would be needed. Any needed new personnel would constitute a potentially significant environmental impact only if the need for new personnel may necessitate the construction of new facilities or expansion of existing facilities, the construction of which may have significant environmental effects.

3.13.2.2 Significance Thresholds

The significance criteria for this analysis is from Appendix G of the State CEQA Guidelines. The proposed project would result in a significant impact if it would:

- *Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:*
 - *Fire Protection?*
 - *Police Protection?*

3.13.2.3 Project Impacts

Fire Protection

The proposed project includes reorganization that would include annexation into the City of Oxnard and detachment from the Ventura County Fire Protection District. Oxnard Fire Department provides fire protection to

the City. The proposed project would be designed and constructed to meet required fire standards that would include adequate emergency vehicle access. Construction would comply with the Occupational Safety and Health Administration (OSHA) and Fire and Building Codes.

Operation of the school facility is anticipated to generate a typical range of service calls including fire suppression, emergency medical, and emergency rescue requests for service. Fire Station 1 located at 491 South "K" Street is within 1.7 miles and Fire Station 4 located at 230 West Vineyard Avenue within 3.2 miles of the project area are close enough to provide fire protection services in within a reasonable response time. The Oxnard Fire Department has provided an estimate that the response time from Fire Station 1 to the corner of Doric Avenue and Patterson Road is approximately 2 minutes, 27 seconds. The response from Fire Station 4 to the corner of Doris Avenue and Patterson Road is approximately 4 minutes 22 seconds (Oxnard Fire Department 2017). Therefore, with compliance with existing regulations, project impact on fire protection services would be less than significant.

Police Protection

The District and its program manager shall direct the contractor to properly fence the site during construction of the school facilities. The fence will help to reduce the potential for materials and equipment to be targets of theft that could result in a need for increased police services during construction.

During operation, the school facilities would be within the service boundary of the Oxnard Police Department. The school facilities are proposed to accommodate both existing and anticipated future enrollment. Public funds such as property taxes would be used to cover the incremental costs associated with providing police services for future enrollment at the facilities. The project would not require the expansion of existing police facilities or the construction of new facilities. As a result, the proposed project would result in a less than significant impact related to police protection during construction and operation of the proposed project.

3.13.2.4 Cumulative Impacts

Fire Protection

The project area would be annexed into the City of Oxnard. As a result, the area for cumulative analysis for fire protection is the City of Oxnard. The proposed project would cause an incremental increase demand on fire protection services. Consistent with General Plan Policies ISC-1.1, ISC-1.2, ISC-1.3 and ISC-1.4, as development in the area occurs, impact fees specific to fire protection would be required and available for allocation by the City of Oxnard to the City of Oxnard Fire Department to ensure adequate levels of service (City of Oxnard 2011).

Police Protection

The project area would be annexed into the City of Oxnard. As a result, the area for cumulative analysis for police protection is the City of Oxnard. The proposed project would cause an incremental increase demand on police protection and would add students, employees and increased traffic that could hinder emergency response. As development in the area occurs, impact fees specific to police protection would be required and available for allocation by the City of Oxnard to the City of Oxnard Police Department to ensure adequate levels of service (City of Oxnard 2011).

3.13.2.5 Mitigation Measures

No Mitigation Measures are required.

3.13.2.6 Level of Impact After Mitigation

No Mitigation Measures are required; project impact would be less than significant.

3.14 TRANSPORTATION AND TRAFFIC

This section provides a discussion of existing transportation and traffic conditions and an analysis of potential impacts on traffic conditions from implementation of the proposed project. This section is based on information provided in the Traffic Impact Analysis Report (TIAR) for the Doris Patterson Educational Facilities prepared by Kunzman Associates, Inc. (KA 2017). The TIAR is included in Appendix K of this EIR.

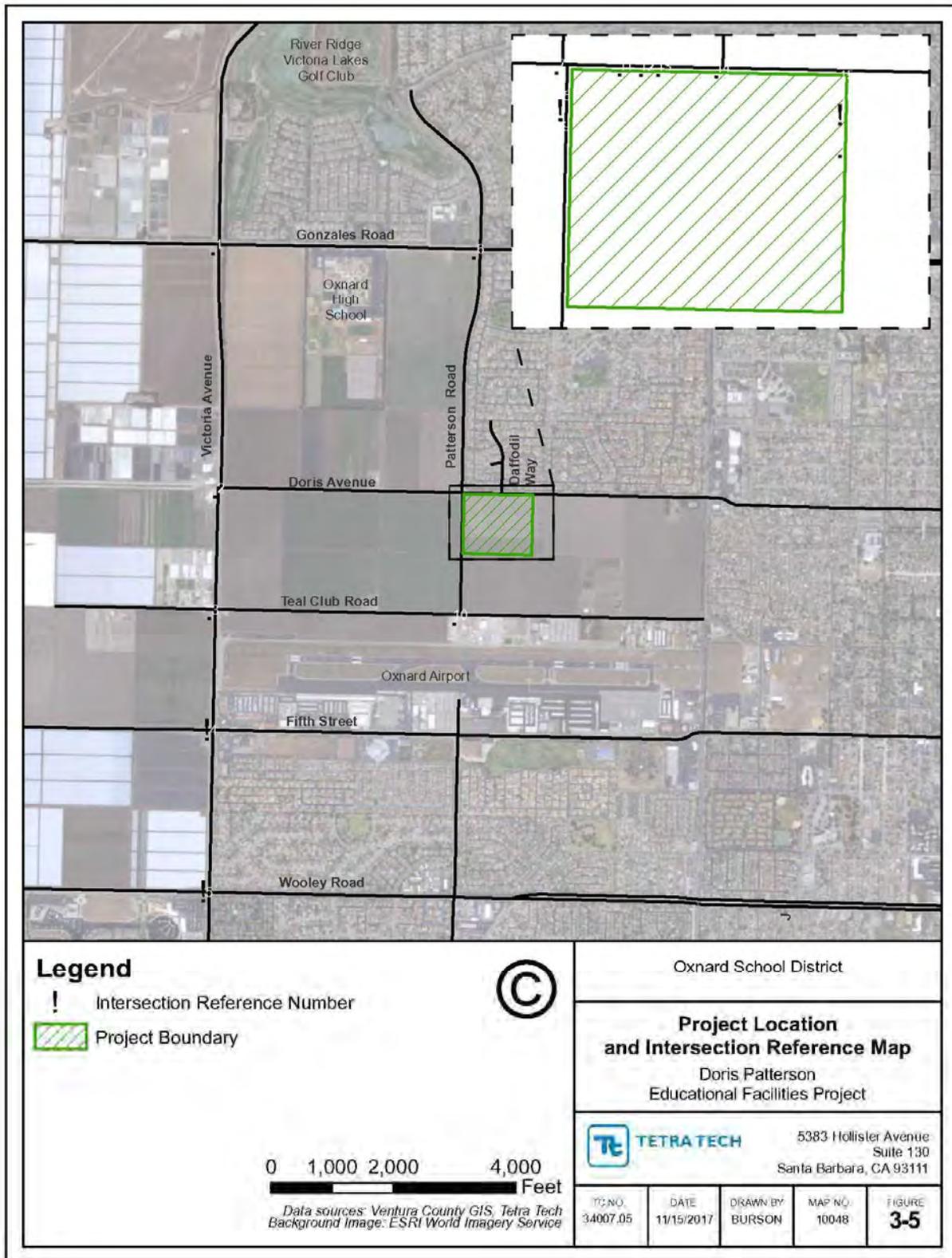
As noted in the Initial Study (Appendix A), the proposed project would not: Result in a change in air traffic patterns including either an increase in traffic levels or a change in location that results in substantial safety risks.

3.14.1 Environmental Setting

3.14.1.1 Existing Conditions

The project site is located at the southeast corner of Patterson Road and Doris Avenue intersection in unincorporated Ventura County and within the City of Oxnard SOI. Study area roadways that would be utilized by the proposed project include Victoria Avenue, Patterson Road, Gonzales Road, Doris Avenue, Teal Club Road, 5th Street, and Wooley Road. The location of these roadways is identified on Figure 3-5 and a description of these roadways is provided herein:

- **Victoria Avenue:** This north-south roadway is currently four lanes divided to six lanes divided in the study area. Victoria Avenue is classified as a Primary Arterial (6 lanes) on the City of Oxnard General Plan Circulation Element.
- **Patterson Road:** This north-south roadway is currently two lanes divided in the study area. Patterson Road is classified as a Local Arterial (2-4 lanes) on the City of Oxnard General Plan Circulation Element.
- **Gonzales Road:** This east-west roadway is currently four lanes divided in the study area. It is classified as a Primary Arterial (6 lanes) east of Victoria Avenue on the City of Ontario General Plan Circulation Element.
- **Doris Avenue:** This east-west roadway is currently two lanes undivided to three lanes divided in the study area. It is classified as a Local Arterial (2-4 lanes) on the City of Oxnard General Plan Circulation Element.
- **Teal Club Road:** This east-west roadway is currently two lanes undivided in the study area. It is classified as a Local Arterial (2-4 lanes) on the City of Oxnard General Plan Circulation Element.
- **Fifth Street:** This east-west roadway is currently four lanes divided in the study area. It is classified as a Secondary Arterial (4 lanes) east of Victoria Avenue and a Local Arterial (2-4 lanes) west of Victoria Avenue on the City of Oxnard General Plan Circulation Element.
- **Wooley Road:** This east-west roadway is currently four lanes divided in the study area. It is classified as a Secondary Arterial (4 lanes) east of Victoria Avenue and a Local Arterial (2-4 lanes) west of Victoria Avenue on the City of Oxnard General Plan Circulation Element.



Study Area Intersections

As part of the TIAR, 17 intersections have been identified and investigated as potentially impacted by the proposed project. These intersections and the jurisdictions they are located in are identified in Table 3-25.

Table 3-25. Study Area Intersections

Study Intersections	Jurisdiction
Victoria Avenue (NS) at:	
Gonzales Road (EW) - #1	City of Oxnard
Doris Avenue (EW) - #2	County of Ventura
Teal Club Road (EW) - #3	City of Oxnard/County of Ventura*
5th Street (EW) - #4	City of Oxnard
Wooley Road (EW) - #5	City of Oxnard
Patterson Road (NS) at:	
Gonzales Road (EW) - #6	City of Oxnard
Doris Avenue (EW) - #7	City of Oxnard/County of Ventura*
Project North Driveway (EW) - #8	County of Ventura*
Project South Driveway (EW) - #9	County of Ventura*
Teal Club Road (EW) - #10	City of Oxnard/County of Ventura*
Project West Driveway (NS) at:	
Doris Avenue (EW) - #11	City of Oxnard
Project Central Driveway (NS) at:	
Doris Avenue (EW) - #12	City of Oxnard
Project East Driveway (NS) at:	
Doris Avenue (EW) - #13	City of Oxnard
Daffodil Way (NS) at:	
Doris Avenue (EW) - #14	City of Oxnard
Middle School Roadway (NS) at:	
Doris Avenue (EW) - #15	City of Oxnard
Project North Driveway (EW) - #16	County of Ventura*
Project South Driveway (EW) - #17	County of Ventura*

* Within City of Oxnard SOI.

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The Intersection Capacity Utilization/Delay for the Existing traffic conditions have been calculated and are shown in Table 3-26.

There are two peak hours in a weekday. The morning peak hour is between 7:00 AM and 9:00 AM, and the evening peak hour is between 4:00 PM and 6:00 PM. The actual peak hour within the two-hour interval is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume.

The study intersections currently operate within acceptable Levels of Service during the peak hours for existing traffic conditions, except for the following study intersection that currently operates at unacceptable Levels of Service during the peak hours:

- Victoria Avenue (NS) at:
Teal Club Road (EW) - #3

Truck Routes. Truck routes are currently provided on Victoria Avenue, Gonzales Road, 5th Street, and Wooley Road in the study area. The City of Oxnard truck route map is depicted on Figure 8 in the TIAR (Appendix K).

Transit Service. The study area is currently served by Gold Coast Transit Routes 19, 20, and 21. Routes 19 and 20 travel along Gonzales Road, Victoria Avenue, and 5th Street. Route 21 travels along Victoria Avenue.

Bicycle Facilities. Patterson Road currently provides an existing Bicycle Facility – Class II (north of Doris Avenue) and is proposed to provide a recommended Bicycle Facility – Class II (south of Doris Avenue). Doris Avenue is proposed to provide a recommended Bicycle Facility - Class II (east of Patterson Road). Figure 10 in the TIAR (Appendix K) identifies the proposed bicycle and pedestrian facilities from the City of Oxnard Bicycle & Pedestrian Facilities Master Plan (February 2011).

Table 3-26. Opening Year (2020) Without Project Intersection Levels of Service

Intersection	Traffic Control ²	Intersection Approach Lanes ³												V/C (Delay)-LOS ³		
		Northbound			Southbound			Eastbound			Westbound			Peak Hour		
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening	
Victoria Avenue (NS) at:																
Gonzales Road (EW) - #1																
- Without Improvements	TS	1	3	1	2	2	1	1	2	d	2	2	1	0.830-D	0.820-D	
- With Improvements	TS	1	3	1	2	3	1	1	2	d	2	2	2	0.652-B	0.592-A	
Doris Avenue (EW) - #2													-			
- Without Improvements	TS	1	2	d	1	2	d	<	1	>	1	1	1	0.888-D	0.785-C	
- With Improvements	TS	1	3	1	1	2	d	<	1	>	1	1	1	0.675-B	0.785-C	
Teal Club Road (EW) - #3																
- Without Improvements	CSS	1	2	d	1	2	d	1	1	1	1	1	1	(99.9-F)	(99.9-F)	
- With Improvements	TS	1	2	d	1	2	d	1	1	1	1	1	1	0.764-C	0.763-C	
5th Street (EW) - #4	TS	2	3	1	2	3	1	1	2	1	2	2	1	0.738-C	0.583-A	
Wooley Road (EW) - #5	TS	1	3	1	1	3	1>	1	2	1	1	2	1>	0.658-B	0.624-B	
Patterson Road (NS) at:																

Table 3-26 (Continued). Opening Year (2020) Without Project Intersection Levels of Service

Intersection	Traffic	Intersection Approach Lanes ³												V/C (Delay)-LOS ³	
		Northbound			Southbound			Eastbound			Westbound			Peak Hour	
		L	T	R	L	T	R	L	T	R	L	T	R	Morning	Evening
Gonzales Road (EW) - #6	TS	1	1	d	1	1	1	1	2	d	1	2	1	0.524-A	0.484-A
Doris Avenue (EW) - #7															
- Without Improvements	AWS	<	1	>	1	1	1	<	1	>	1	1	1	(14.4-B)	(12.1-B)
- With Improvements	TS	<	1	>	1	1	1	<	1	>	1	1	1	0.393-A	0.321-A
Teal Club Road (EW) - #10	CSS	<	1	>	<	1	>	<	1	>	<	1	>	(12.5-B)	(13.0-B)
Daffodil Way (NS) at:															
Doris Avenue (EW) - #14	CSS	0	0	0	1	0	d	1	1	0	0	2	d	(14.3-B)	(13.1-B)

¹ TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop Control

² When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d = De Facto Right Turn; <1> = Shared Left/Through/Right; > = Right Turn Overlap; BOLD = Improvements

³ Volume to capacity ratio (V/C), delay, and Level of Service (LOS) have been calculated using the following analysis software: Vistro, Version 5.00-02.

Delay-based results are shown in parenthesis. For intersections with cross street stop control, the delay and Level of Service for the worst approach are shown. (99.9) = Delay High, Intersection Unstable, Level of Service F.

3.14.1.2 Regulatory Setting

Federal Regulations

There are no relevant federal transportation and circulation regulations applicable to the proposed project.

State Regulations

2016-2040 Regional Transportation Plan (RTP) and Sustainable Community Strategy (SCS).

The Southern California Association of Governments (SCAG) is the designated Metropolitan Planning Organization (MPO) for Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. SCAG is mandated by the federal government to develop a multimodal long-range transportation plan that provides a 20-year vision for investing in our transportation system, and update it at least once every four years. The 2016-2040 RTP/SCS, addresses all modes of our transportation system, and reflects research and policy initiatives from each mode: active transportation, aviation and airport ground access, corridor planning, goods movement, high-speed rail, intelligent transportation systems, safety and security, transit, and transportation finance (SCAG 2017).

Congestion Management Program

Ventura County Transportation Commission (VCTC) is the designated Congestion Management Authority (CMA) for Ventura County and is responsible for coordinating land use, transportation planning, and air quality to mitigate traffic congestion (VCTC 2017). The Congestion Management Program (CMP) provides local agencies and private developers the procedures and tools necessary to manage and decrease traffic congestion in the County (VCTC 2009).

Local Regulations

The City of Oxnard requires payment of a Traffic Impact Fee for new development based on the traffic increases resulting from each project. The funds accumulated by the City through assessment of these fees are earmarked for improvements to the City's transportation network, including arterial roads and intersections.

The County of Ventura also administers a traffic impact mitigation fee program to address the cumulative adverse impacts of development on the County's road network. As the City of Oxnard currently has a reciprocal agreement with the County, the Oxnard School District would be required to pay both City of Oxnard and County of Ventura traffic mitigation fees to mitigate for project related contributions to the City and regional road network.

3.14.2 Impact Analysis

3.14.2.1 Methodology

The traffic impact analysis must include all monitored intersections to which the project adds traffic above a certain minimum amount. In Ventura County, the monitored intersections are contained in the CMP. According to the CMP, the minimum acceptable standard for traffic operations is Level of Service E during the peak hours.

The performance criteria used for evaluating traffic volumes and roadway capacities are based on the City of Oxnard standards of Intersection Capacity Utilization methodology for calculating Levels of Service at signalized intersections during the morning and evening peak hours. For unsignalized intersections, the Highway Capacity Manual delay methodology was used.

According to the City of Oxnard criteria, Level of Service C during the peak hours is considered the worst acceptable Level of Service for an intersection. A project causes a significant impact if it contributes 0.02 or more to the Intersection Capacity Utilization value at an intersection operating at Level of Service C or worse during the peak hours. If the addition of project traffic volumes increases by 0.02 or more at an intersection operating at Level of Service C or worse, it should be mitigated to the Level of Service identified without the addition of the project traffic volumes.

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The technique used to assess the capacity needs of an unsignalized intersection is known as the Intersection Delay Method. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection.

Project trips are generated using rates and procedures contained in the Institute of Transportation Engineers *Trip Generation Manual*, 10th edition, 2017. The project trip distributions are provided by the reviewing agency or are agreed to in advance of the traffic impact analysis being prepared. The traffic impact analysis has to be prepared by a licensed traffic engineer.

The project generated trips were added to intersections, and a full intersection analysis was conducted, even when the project added traffic failed to meet the minimum thresholds that require an intersection analysis.

3.14.2.2 Significance Thresholds

The performance criteria used for evaluating traffic volumes and roadway capacities are based on the City of Oxnard standards of Intersection Capacity Utilization methodology for calculating Levels of Service at signalized intersections during the morning and evening peak hours. For unsignalized intersections, the Highway Capacity Manual delay methodology was used.

According to the City of Oxnard criteria, Level of Service C during the peak hours is considered the worst acceptable Level of Service for an intersection. A project causes a significant impact if it contributes 0.02 or more to the Intersection Capacity Utilization value at an intersection operating at Level of Service C or worse during the peak hours. If the addition of project traffic volumes increases by 0.02 or more at an intersection operating at

Level of Service C or worse, it should be mitigated to the Level of Service identified without the addition of the project traffic volumes.

The thresholds for transportation and traffic impacts used in this analysis are consistent with Appendix G of the State CEQA Guidelines. The effects of the proposed project related to transportation and traffic are considered to be significant if the proposed project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

3.14.2.3 Project Impacts

Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

A traffic study was conducted for the proposed project (see the TIAR in Appendix K). As part of the TIAR, traffic counts were collected at nine intersections for AM and PM peak hours. Trip generation estimates were determined for the project site based on anticipated enrollment and standard trip generation rates. The trip generation was coordinated with City of Oxnard staff. Trips were distributed based on school routes and student information. The TIAR calculated intersection levels of service for existing conditions, cumulative conditions, and 2030 General Plan conditions with and without the proposed project. Cumulative conditions were developed based on a list of related (approved and pending) projects provided by City of Oxnard staff and 2030 General Plan traffic data from the Oxnard Traffic Model (OTM).

Project Trip Generation

The trips generated by the project were determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, vehicles to drive, and lifestyles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes were determined. Table 3-27 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers *Trip Generation Manual*, 10th edition, 2017 and information provided by the Oxnard School District.

As shown in Table 3-27, the proposed development is projected to generate a total of approximately 3,551 daily vehicle trips, 990 trips of which will occur during the morning peak hour and 306 trips of which will occur during the evening peak hour.

To determine the trip distributions for the proposed project, the school boundary map, locations of existing elementary and middle schools, intersection turning movement counts of the existing directional distribution of trips for existing areas in the vicinity of the site, previous traffic studies conducted in the study area, and other additional information on future development and traffic impacts in the area were reviewed. Please refer to Figures 12 to 17 in the TIAR (Appendix K) contain the directional distributions of the project trips for the proposed land uses.

Based on the identified trip generation and distributions, morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 18 and 19 in the TIAR (Appendix K), respectively.

The trip reducing potential of public transit was not considered in the TIAR. Essentially the trip projections are conservative in that public transit would reduce the traffic volumes.

Table 3-27. Project Trip Generation¹

Descriptor	Land Use	Quantity	Units ²	Peak Hour						Daily
				Morning			Evening			
				Inbound	Outbound	Total	Inbound	Outbound	Total	
Trip Generation Rates	Elementary School (K-5)		ST	0.36	0.31	0.67	0.08	0.09	0.17	1.89
	Middle School (6-8)		ST	0.31	0.27	0.58	0.08	0.09	0.17	2.13
	District Office		TSF	2.51	0.83	3.34	0.43	1.28	1.71	22.59
Trips Generated	Elementary School (K-5)	550	ST	198	171	369	44	50	94	1,040
	- School Bus ³	150	ST	3	3	6	3	3	6	12
	Middle School (6-8)	900	ST	279	243	522	72	81	153	1,917
	- School Bus ⁴	300	ST	5	5	10	5	5	10	20
	District Office	24.868	TSF	62	21	83	11	32	43	562
	Total				547	443	990	135	171	306

¹ Source: Institute of Transportation Engineers, *Trip Generation Manual*, 10th Edition, 2017, Land Use Codes 520, 522, and 730.

² ST = Students; TSF = Thousand Square Feet

³ Based upon the 2016-17 school year data, the Oxnard School District estimates that the proposed project will have approximately 150 of the 700 elementary school students riding the school buses. The maximum capacity of a standard school bus is 72 passengers.

⁴ Based upon the 2016-17 school year data, the Oxnard School District estimates that the proposed project will have approximately 300 of the 1,200 middle school students riding the school buses. The maximum capacity of a standard school bus is 72 passengers.

Existing Plus Project Traffic Impacts

Traffic impacts were analyzed based on the existing plus project condition in an effort to determine whether the additional trips generated by the proposed project would result in significant impacts to the study intersections.

The Intersection Capacity Utilization/Delay for the existing plus project traffic conditions have been calculated are shown in Table 3 in the TIAR (Appendix K). Existing plus project morning and evening peak hour intersection turning movements are shown on Figures 20 and 21 in the TIAR (Appendix K).

The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for existing plus project traffic conditions, except for the following three study intersections: Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for existing plus project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than significant level.

According to the City of Oxnard criteria, Level of Service C during the peak hours is considered the worst acceptable Level of Service for an intersection. A project causes a significant impact if it contributes 0.02 or more to the Intersection Capacity Utilization value at an intersection operating at Level of Service C or worse during the peak hours. If the addition of project traffic volumes increases by 0.02 or more at an intersection operating at Level of Service C or worse, it should be mitigated to the Level of Service identified without the addition of the project volumes.

The project trips significantly impact the following three study intersections for existing plus project traffic conditions as shown in Table 4 in the TIAR (Appendix K): Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7.

Traffic signals are projected to be warranted at the following two intersections for the existing plus project traffic conditions as shown in Appendix D in the TIAR: Victoria Avenue (NS) at Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. Therefore, Mitigation Measures TRAF-2 and TRAF-4 have been added to reduce potentially significant traffic impacts to a less than significant level.

Opening Year (2020) Traffic Impacts

The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2020) without project traffic conditions, except for the following three study intersections as shown in Table 5 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2020) without project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than significant level.

Opening Year (2020) With Project Traffic Impacts

The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2020) with project traffic conditions, except for the following three study intersections as shown in Table 6 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2020) with project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than significant level.

The project trips significantly impact the following two study intersections for Opening Year (2020) with project traffic conditions as shown in Table 7 in the TIAR (Appendix K): Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3.

Interim Year (2021) Traffic Impacts

The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) without project traffic conditions, except for the following four study intersections as shown in Table 8 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3 and 5th Street (EW) – #4. With improvements, these four study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) without project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than significant level.

Interim Year (2021) With Project Traffic Impacts

The study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) with project traffic conditions, except for the following six study intersections as shown in Table 9 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at Doris Avenue (EW) – #7

and Teal Club Road (EW) – #10. With improvements, these six study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) with project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than significant level.

The project trips significantly impact the following five study intersections for Interim Year (2021) with project traffic conditions as shown in Table 10 in the TIAR (Appendix K): Victoria Avenue (NS) at: Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at: Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10.

Alternative Transportation (Public Transit, Bicycle, and Pedestrian)

The study area is currently served by Gold Coast Transit Routes 19, 20, and 21. Routes 19 and 20 travel along Gonzales Road, Victoria Avenue, and 5th Street. Route 21 travels along Victoria Avenue. Gold Coast Transit would continue to provide bus service to the study area with the proposed project. In addition, OSD provides school buses to transport students to and from school. The new schools would also be designed to include bicycle racks for students and staff who chose to bike to school. Currently, there are sidewalks along the northern side of Doris Avenue. Sidewalk improvements adjacent to the educational facilities are anticipated as part of the proposed project which would result in a beneficial impact by improving pedestrian facilities in the area. Therefore, project impacts on public transit, bicycle, or pedestrian facilities would be less than significant.

Parking

A total of 220 parking spaces are proposed for the proposed project and will meet City of Oxnard parking rate requirements. A District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. A parking lot with 42 spaces would be provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces would be provided within the drop-off and pick-up area to the west. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pickup area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed new access road is expected to terminate at the southernmost access to the parking lot for the school. Based on a proposed parking supply of 220 spaces, adequate parking would be provided for the District office, elementary school, and middle school.

Incorporation of Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4 would reduce all potentially significant impacts related to transportation and traffic to a less than significant level.

Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The Ventura County CMP (VCTC 2009) provides the procedures and tools necessary to manage and decrease traffic congestion in the County. The VCTC is the designated CMA responsible for implementing the CMP in Ventura County. VCTC has adopted the minimum LOS standard of “E” for the CMP road network. The adopted VCTC minimum standard is consistent with state statutes under California Government Code Section 65089(b)(1)(B). The minimum standard adopted by VCTC only applies to the CMP; local agency LOS minimum standards may be higher than the CMP minimum (VCTC 2009).

Project and cumulative impacts were analyzed by adding project traffic to the existing traffic volumes, Opening Year (2020) forecasted volumes, and Interim Year (2021) forecasted volumes at study area intersections in accordance with the CMP. Results of this analysis are discussed as follows.

Existing Plus Project Conditions

As previously stated, the study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for existing plus project traffic conditions, except for the following three study intersections: Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for existing plus project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than significant level.

The project trips significantly impact the following three study intersections for existing plus project traffic conditions as shown in Table 4 in the TIAR (Appendix K): Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7.

Traffic signals are projected to be warranted at the following two intersections for the existing plus project traffic conditions as shown in Appendix D in the TIAR: Victoria Avenue (NS) at Teal Club Road (EW) – #3 and Patterson Road (NS) at Doris Avenue (EW) – #7. Therefore, Mitigation Measures TRAF-2 and TRAF-4 have been added to reduce potentially significant traffic impacts to a less than significant level.

Opening Year (2020) With Project Conditions

As previously stated, the study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Opening Year (2020) with project traffic conditions, except for the following three study intersections as shown in Table 6 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3. With improvements, these three study intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2020) with project traffic conditions. Therefore, Mitigation Measures TRAF-1 and TRAF-2 have been added to reduce potentially significant traffic impacts to a less than significant level.

The project trips significantly impact the following two study intersections for Opening Year (2020) with project traffic conditions as shown in Table 7 in the TIAR (Appendix K): Victoria Avenue (NS) at Doris Avenue (EW) – #2 and Teal Club Road (EW) – #3.

Interim Year (2021) With Project Conditions

As previously stated, the study intersections are projected to operate within acceptable Levels of Service (C or better) during the peak hours for Interim Year (2021) with project traffic conditions, except for the following six study intersections as shown in Table 9 in the TIAR (Appendix K): Victoria Avenue (NS) at Gonzales Road (EW) – #1, Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10. With improvements, these six study intersections are projected to operate within acceptable Levels of Service during the peak hours for Interim Year (2021) with project traffic conditions. Therefore, Mitigation Measures TRAF-1, TRAF-2, and TRAF-3 have been added to reduce potentially significant traffic impacts to a less than significant level.

The project trips significantly impact the following five study intersections for Interim Year (2021) with project traffic conditions as shown in Table 10 in the TIAR (Appendix K): Victoria Avenue (NS) at Doris Avenue (EW) – #2, Teal Club Road (EW) – #3, and 5th Street – #4 and Patterson Road (NS) at Doris Avenue (EW) – #7 and Teal Club Road (EW) – #10.

Incorporation of Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4 below, would reduce all potentially significant impacts related to transportation and traffic to a less than significant level.

Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would be designed and constructed to meet required standards. Sight distance at the project accesses would comply with standard California Department of Transportation and City of Oxnard sight

distance standards. The final grading, landscaping, and street improvement plans would demonstrate that sight distance standards are met. Such plans would be reviewed by the City and approved as consistent with this measure prior to issuance of the grading permits. No slope or object over 30 inches would be in the line of sight area. Per the TIAR (Appendix K), there would be no increase in hazards due to a design feature or incompatible uses. Therefore, with compliance with existing regulations, project impact would be less than significant and no mitigation is required.

Would the project result in inadequate emergency access?

The proposed project would not restrict or reduce emergency access to the project site. The proposed project would be designed and constructed to meet required standards including adequate emergency access. All driveways would be designed according to City standards to facilitate emergency vehicle access. As part of standard development procedures, site plans would be submitted for review and approval to ensure adequate emergency access prior to construction. Therefore, with compliance with existing requirements, project impact would be less than significant and no mitigation is required.

Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The proposed project would be designed and constructed to meet required standards including adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The study area is currently served by Gold Coast Transit Routes 19, 20, and 21. Routes 19 and 20 travel along Gonzales Road, Victoria Avenue, and 5th Street. Route 21 travels along Victoria Avenue. Gold Coast Transit would continue to provide bus service to the study area with the proposed project. In addition, OSD provides school buses to transport students to and from school. Due to the fact that existing Gold Coast Transit routes in the vicinity of the proposed project are operating within capacity and additional ridership resulting from project implementation could be accommodated, no significant impacts to public transportation services are anticipated.

Patterson Road currently provides an existing Bicycle Facility – Class II (north of Doris Avenue) and is proposed to provide a recommended Bicycle Facility – Class II (south of Doris Avenue). Doris Avenue is proposed to provide a recommended Bicycle Facility - Class II (east of Patterson Road). Figure 10 in the TIAR (Appendix K) identifies the proposed bicycle and pedestrian facilities from the City of Oxnard Bicycle & Pedestrian Facilities Master Plan (February 2011). The educational facilities would also be designed to include bicycle racks for students and staff who bicycle to school.

Currently, there are sidewalks along the northern side of Doris Avenue. Sidewalk improvements adjacent to the educational facilities are anticipated as part of the proposed project, which would result in a beneficial impact by improving pedestrian facilities in the area. This would allow students and staff to safely walk to/from the educational facilities and the surrounding neighborhood.

Therefore, project impact on public transit, bicycle, or pedestrian facilities would be less than significant and no mitigation is required.

3.14.2.4 Cumulative Impacts

The Opening Year (2020) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been “conservatively” added to the traffic volume forecasts. The traffic volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM.

The Interim Year (2021) traffic volumes were obtained from The Teal Club Specific Plan – EIR Traffic Impact Study (Stantec 2014). It should be noted that the project site is located within the Teal Club Specific Plan; however, the proposed project has been “conservatively” added to the traffic volume forecasts. The traffic

volumes were calculated based on the straight line growth from the existing traffic volumes to the Year 2030 traffic volumes obtained from the OTM.

The cumulative impacts and mitigation measures for the Existing Plus Project Traffic Conditions, Opening Year (2020) With Project Traffic Conditions and Interim Year (2021) With Project Traffic Conditions are discussed in Section 3.14.2.5.

The County of Ventura also administers a traffic impact mitigation fee program to address the cumulative adverse impacts of development on the County's road network. As the City of Oxnard currently has a reciprocal agreement with the County, the Oxnard School District would be required to pay both City and County of Ventura traffic mitigation fees to mitigate for project related contributions to the City and regional road network.

3.14.2.5 Mitigation Measures

TRAF-1: Victoria Avenue (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department for intersection improvements at Victoria Avenue (NS) at Doris Avenue (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.

TRAF-2: Victoria Avenue (NS) at Teal Club Road (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department for intersection improvements at Victoria (NS) at Teal Club Road (EW) based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.

TRAF-3: Patterson Road (NS) at Doris Avenue (EW). Implement improvements on Patterson Road between Doris Avenue and Teal Club Road to widen this roadway segment to local arterial standards. The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2025 Phase 2 Teal Club development.

TRAF-4: Patterson Road (NS) at Doris Avenue (EW). The Oxnard School District will be required to pay their fair share contribution for improvements as determined by the City's Traffic Engineering Department based on the project's trip generation and distribution. Payments shall occur prior to occupancy clearance for any portion of 2020 school development.

3.14.2.6 Level of Impact After Mitigation

Based on implementation of, and compliance with, Mitigation Measures TRAF-1, TRAF-2, TRAF-3, and TRAF-4, the potentially significant impacts during the construction of the proposed project related to transportation and traffic would be reduced to less than significant.

3.15 UTILITIES AND SERVICE SYSTEMS

This section analyzes potential impacts to City of Oxnard utility and service systems, including water supply and associated conveyance infrastructure, wastewater conveyance and treatment infrastructure, storm drain infrastructure, and solid waste disposal systems. This section is partially based on the Phoenix Civil Engineering, Inc. *Oxnard School District – Doris Avenue/Patterson Road Educational Facilities – Project Water Resource System Analysis* (2017) (Appendix J), TCSP's Water Supply Assessment prepared by Milner-Villa Consulting in August 2014 and the *Teal Club Development Infrastructure Review* prepared by Kennedy/Jenks in 2007.

3.15.1 Environmental Setting

3.15.1.1 Existing Conditions

Water Supply

The summary of water supply provided in this subsection is based upon the *City of Oxnard 2015 Urban Water Management Plan* prepared by MNS Engineers, Inc. (2016) and the *Water Supply Assessment Teal Club Development* report (WSA) prepared by Milner-Villa Consulting (2015).

Supply Sources. Three sources of water are used by the City: local groundwater supplied by City-owned groundwater wells, groundwater imported under contract with the United Water Conservation District (UWCD), and surface water imported from Calleguas Municipal Water District (CMWD). For the most part, City customers receive a blend of these supplies, of which the proportion changes based on the supplies available to the City. Over time, the City's recycled water system will obtain supplies from the OWTP. Table 3-28 summarizes the projected sources of water for the City of Oxnard through 2040, based upon estimates included within the City of Oxnard 2015 Urban Water Management Plan (MNS Engineers, Inc. 2016).

Table 3-28. Summary of Existing and Projected Water Supplies (acre-feet)¹

Water Supply	2015 ²	2020	2025	2030	2035	2040
City Groundwater ³	7,110	14,186	21,186	21,186	21,186	21,186
UWCD	7,344	7,329	7,329	7,329	7,329	7,329
CMWD	10,612	11,826	11,826	11,826	11,826	11,826
Recycled Water	605	14,000	14,000	14,000	14,000	14,000
TOTAL	25,671	40,341	54,341	54,341	54,341	54,341

Notes:

- 1 Source: *City of Oxnard 2015 Urban Water Management Plan*, MNS Engineers, Inc. 2016
- 2 2015 supplies represent actual consumption, not a limitation in water supply.
- 3 The Desalter treats groundwater, therefore is not included as a separate line item of Desalinated Water. Groundwater includes 7,186 AFY from well extraction plus recycled water supply from groundwater recharge, 7,000 AFY in 2020, 14,000 AFY effective 2025. Recycled Water includes the 8,525 AFY of ASR starting in 2025.

The following summarizes the City's various sources of supply and discusses associated environmental or reliability issues.

1. **Local Groundwater Supply.** The Oxnard Plain Pressure Groundwater Basin extends to approximately 2,000 feet bgs within the project area. It is composed of a semi-perched aquifer and clay cap that is exposed at the ground surface, and that is underlain by an Upper Aquifer System (UAS) and a Lower Aquifer System (LAS). The semi-perched aquifer is separated from the underlying UAS by the clay cap that is up to 180 feet thick. Groundwater in the semi-perched aquifer is typically not used due to limited well yield and poor water quality. The UAS and LAS serve as the primary source of groundwater in the Oxnard region. The UAS is separated from the deeper LAS by a clay lens that averages over 80 feet in thickness. Groundwater recharge in the Oxnard Plain originates mainly from surface and subsurface

flows of the Santa Clara River that infiltrate in the Plain Forebay Basin located beneath the El Rio area of northern Oxnard. The City of Oxnard currently operates 10 wells. None of the City's wells are located within the project area.

The local groundwater supplies which the City relies upon are regulated by the Fox Canyon Groundwater Management Agency (FCGMA). The FCGMA was legislatively created in 1983 to manage the main groundwater supply aquifers for the City: the Oxnard Plain and the Oxnard Forebay Basins. The FCGMA promotes responsible groundwater management through the implementation of its Groundwater Management Plan, which was last updated in May 2007. The FCGMA Groundwater Management Plan contains a variety of programs intended to further its goals of preserving the local groundwater basin resources, but two primary strategies are highlighted: a) aggressive development and use of recycled water, and b) reducing local groundwater pumping in areas that are difficult to recharge and are prone to localized over-pumping. The Groundwater Management Plan describes these stressed areas being supplied with alternative sources (e.g., recycled water, surface water, or groundwater obtained from areas easily recharged) and in turn, the conservation credits are transferred for use in and around the Oxnard Forebay Basin since it is easily recharged.

Groundwater allocations are issued by the FCGMA to every municipal and industrial groundwater user within its jurisdiction, including the City of Oxnard. Allocations are monitored by the FCGMA. The City's baseline groundwater pumping allocation is 936 AFY, but obtains additional allocation by way of participation in the UWCD's Good Deed Credit Trust Program (i.e., 1,000 AFY through 2019) and separate agreements with other users (i.e., 700 AFY of credits through 2036). Groundwater users may "bank" any unused groundwater allocation in the form of credits, which can subsequently be used to offset any pumping and surcharges in following years. In April 2014, the FCGMA issued Emergency Ordinance E, which states that, "...conservation credits shall not be obtained and may not be used to avoid paying surcharges for extractions while this emergency ordinance is in effect." It also imposes additional pumping restrictions within the jurisdiction of the FCGMA, including an additional 10% on July 1, 2014, additional 5% on January 1, 2015, and additional 5% on July 1, 2015.

The FCGMA will grant the City additional groundwater allocations when it takes over water service responsibility for newly developed lands (e.g., conversion of agricultural lands to commercial, industrial, and/or residential uses). More specifically, Section 5.3.3 of the FCGMA Ordinance Code allows for the transfer of 2 acre-feet per acre when agricultural lands are converted to municipal uses (2013). Pursuant to Section 5.4 of the FCGMA Ordinance Code, the conversion rate of 2 acre-feet per year is subject to a reduction of 25% in order to eliminate overdraft of the aquifer within the boundaries of the FCGMA.

In addition to the City's own groundwater allocation, it has a water supply contract with UWCD. UWCD diverts water from the Santa Clara River at the Vern Freeman Diversion Dam and delivers a portion of it to the Satocoy and El Rio Spreading Grounds as well as to agricultural users on the Oxnard Plain. Surface water percolated in these spreading basins recharges the Oxnard Forebay Basin and the Oxnard Plain Basin. Eleven UWCD wells used to extract the water and deliver it to customers. Of the 11 wells, three extract water from the LAS, and eight extract water from the UAS. The City's contract with the UWCD holds FCGMA allocations for the benefit of the City. These allocations are exercised by the UWCD upon delivery of groundwater from its wells to the City. **Error! Reference source not found.** indicates the UWCD provided 28.6% (7,344 acre-feet) of the City's supply in 2015, and that the City anticipates purchasing approximately 7,329 acre-feet per year (AFY) of groundwater for the period of 2020 to 2040.

Lastly, the City's Groundwater Recovery Enhancement and Treatment (GREAT) Program will provide approximately 20,000 AFY of additional supply. The Oxnard Wastewater Treatment Plant (OWTP) currently produces approximately 24 million gallons per day (mgd), or about 32,000 AFY, of secondary treated wastewater and discharges the effluent to the Pacific Ocean through its ocean outfall. The GREAT Program will beneficially reuse up to 90% of treated wastewater resources through advanced

water treatment, a recycled water delivery system, groundwater injection wells, groundwater desalination, and a concentrate collection system.

2. *Imported Surface Water Supply.* The CMWD purchases SWP water from the Metropolitan Water District (MWD) of Southern California. MWD delivers water to CMWD via the West Valley Feeder, which is either stored in Lake Bard to be re-treated before distribution or is fed directly to the Springville Reservoir near Camarillo. The water supply projections detailed in CMWD's 2010 UWMP are based on MWD's SWP supply projections, along with anticipated local supplies (Milner-Villa 2014).

The MWD imports water from two primary sources: the Colorado River and the State Water Project (SWP) operated by the California Department of Water Resources (DWR). MWD's imported water supply projections contained in its 2010 Regional Urban Water Management Plan (2010) are based on the 2009 SWP Reliability Report.

The State Water Project is owned by the State of California and operated by the DWR. It is the largest state-built project in the country with the primary purpose of delivering water to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California, including 25 million urban users and 750,000 acres of farmland. Of the contracted water supply, approximately 70% serves urban users and 30% serves agricultural users (Department of Waste Resources 2017). The State Water Project, Final Reliability Report 2013 (2014) provided a projection of DWR's water delivery reliability for a 2013 scenario and future (2033) scenario. The SWP Final Reliability Report 2013 indicated that the SWP, using existing facilities operated under current regulatory and operational constraints and future (2033) anticipated conditions, and with all contractors requesting delivery of their full Table A allocations in most years, could deliver 58% of Table A allocations on a long-term average basis. However, in a single dry-year (worst-case scenario) DWR estimated delivery of an average of only 11% of Table A allocations. In a four-year drought scenario, DWR estimated delivery of an average of 31% of Table A allocations.

City Demand. Table 3-29 depicts the City's water demand projections through the year 2040 (MNS Engineers, Inc. 2016).

Table 3-29. Projected Total Water Demands

	2020	2025	2030	2035	2040
Potable and Raw Water	32,664	34,054	35,445	36,835	38,225
Recycled Water Demand	7,000	7,000	7,000	7,000	7,000
TOTAL	39,664	48,054	49,445	50,835	52,225

Projected Water Supply Balance. Table 3-30 provides a comparison of the projected water supply and demands for a normal, single-dry, and multiple dry water years (MNS Engineers, Inc. 2016). The City's supplies are sufficient during normal year supply and demand; however, the City's supplies may not be sufficient in 2020 under a single-dry year scenario. The multiple dry year scenario projects the City's supplies may not be sufficient in 2020, 2030, 2035, and 2040. It should be noted that estimates of water demand are highly conservative and include a contingency factor. Additionally, the demands listed do not include anticipated reductions due to drought demand management measures or public conservation efforts during drought conditions. Lastly, additional supplies could also be available from CMWD.

Table 3-30. Projected Water Supply Balance¹

	2020	2025	2030	2035	2040
Normal Year Supply and Demand					
Supply Total	40,341	54,341	54,341	54,341	54,341
Demand Total	39,664	48,054	49,445	50,835	52,225
Difference	677	6,287	4,896	3,506	2,116
Single-Dry Year Supply and Demand					
Supply Total	39,247	52,867	52,867	52,867	52,867
Demand Total	39,664	48,054	49,445	50,835	52,225
Difference	(417)	4,813	3,422	2,032	642
Multiple Dry Years Supply and Demand Comparison					
Year 1 Supply Total	38,756	52,206	52,206	52,206	52,206
Year 1 Demand Total	39,664	48,054	49,445	50,835	52,225
Difference	(908)	4,152	2,761	1,371	(19)
Year 2 Supply Total	38,426	51,762	51,762	51,762	51,762
Year 2 Demand Total	39,664	48,054	49,445	50,835	52,225
Difference	(1,238)	3,708	2,317	927	(463)
Year 3 Supply Total	36,383	49,009	49,009	49,009	49,009
Year 3 Demand Total	39,664	48,054	49,445	50,835	52,225
Difference	(3,281)	955	(436)	(1,826)	(3,216)

Notes:

¹ Demands listed are conservative as they do not include reductions due to drought demand management measures or public conservation efforts during drought conditions. Additional supplies could also be available from CMWD.

Wastewater

The City of Oxnard Public Works Department, Wastewater Section, owns, operates, and maintains wastewater collection and treatment infrastructure in the City, including over 407 miles of gravity sewers, 23 miles of pressurized force mains, and 15 wastewater pumping stations (Wastewater Collection System Capital Improvement Projects 2017). The collection system conveys wastewater to the OWTP. The OWTP has a current capacity of 31.7 mgd with average daily flows of approximately 24.0 mgd.

The project area is served by the 21-inch Western Trunk Sewer that flows south along Patterson Road then west along Teal Club Road, and by the 42-inch Redwood Trunk Sewer that flows south along Ventura Road (Kennedy/Jenks Consultants 2007). The Redwood Trunk Sewer was designed to accept flows from future growth as projected under full buildout of the 2030 General Plan, including the project Site. The Redwood Trunk Sewer is currently operating below capacity. The Western Trunk Sewer is currently operating near design capacity (Kennedy/Jenks Consultants 2007).

Stormwater

The City of Oxnard relies on storm drain facilities, maintained by the City of Oxnard Public Works Department Operations Division and Ventura County Watershed Protection District (VCWPD), to convey stormwater runoff. The drainage system eventually discharges to the Pacific Ocean. The Site is located within the City of Oxnard's West Fifth Street watershed which drains approximately 802 acres (1.25 square miles). The cumulative site drainage is directed toward a 24-inch corrugated metal pipe culvert under N. Patterson Road at the corner of the Teal Club Rd and N. Patterson Road. This culvert outlets into an open unlined drainage ditch that runs west to Victoria Avenue along the north side of Teal Club Road, before discharging to the West Fifth Street Drain. The

West Fifth Street Drain ultimately discharges to the Edison Canal which is an intake canal to the Mandalay Generating Station owned by NRG Energy.

3.15.1.2 Regulatory Setting

Federal

The federal Clean Water Act establishes regulatory requirements for the raw and treated water quality used as potable water supplies. The City of Oxnard is required to monitor water quality and conform to the regulatory requirements of the CWA.

The federal Safe Drinking Water Act (SDWA) establishes standards for contaminants in drinking water supplies. Maximum contaminant levels and treatment techniques are established for each of the contaminants, which include metals, nitrates, asbestos, total dissolved solids, and microbes.

State

California's Safe Water Drinking Act was enacted in 1976. The California State Water Resources Board, Division of Drinking Water (DDW) has been granted primary enforcement responsibility for the SWDA. Title 22 of the California Administrative Code stipulates drinking water quality and monitoring standards; standards are equal to or more stringent than federal standards.

In January 2014, Governor Brown issued Proclamation No. 1-17-2014 declaring a drought State of Emergency to exist in California due to severe drought conditions presenting urgent problems to drinking water supplies, cultivation of crops, and threatening the survival of animals and plants that rely on California's water resources. In response to the January 2014 Proclamation, the SWRCB adopted in July 2014, Resolution 2014-0038, which defined water conservation regulations including prohibitions for all water users and required actions for all water agencies. On April 1, 2015, Governor Brown issued Executive Order B-29-15, which ordered the SWRCB to impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016, relative to a baseline of 2013 water use (State of California, Executive Order B-29-15, April 2015). In response to Executive Order B-29-15, the SWRCB adopted Resolution No. 2015-0032 and a regulation pursuant to Water Code section 1058.5 that, among other things, required a mandatory 25% statewide reduction in potable urban water use between June 2015 and February 2016. Under the adopted regulation, the City of Oxnard was required to cut its water usage by 12%. Due to higher than average rainfall in California during the 2017 water year, Governor Brown issued Executive Order B-40-17 on April 7, 2017. Executive Order B-40-17 directed the SWRCB to rescind portions of its existing emergency regulations that require a water supply stress test or mandatory conservation standard for urban water agencies, to continue development of permanent prohibitions on wasteful water use, permanent requirements for reporting water use by urban water agencies, and to continue the portions of the emergency regulations that prohibit certain wasteful water practices and require water use reporting as a bridge until permanent requirements are in place.

Pursuant to the Urban Water Management Planning Act (California Water Code §§ 10610 - 10656) urban water suppliers having more than 3,000 service connections or water use of more than 3,000 acre-feet per year (af/yr) for retail or wholesale uses are required to submit an Urban Water Management Plan (UWMP) every five years to the CDWR. UWMPs are prepared to support long-term resource planning and to ensure that reliable and adequate water supplies are available to meet existing and future demands over a 20-year planning horizon during normal, single-dry and multiple-dry year periods. The Water Conservation Act of 2009 (often referred to as SBX7-7) requires increased emphasis on water demand management and requires the state to achieve a 20% reduction in urban per capita water use by December 31, 2020. Retail urban water suppliers are required to report baseline and compliance data in their UWMPs in accordance with the requirements of SBX7-7. The City of Oxnard adopted its current UWMP in 2015.

State Assembly Bill 939 required the City of Oxnard's source reduction and recycling element to include an implementation schedule showing 50% diversion of solid waste from landfill disposal or transformation, on and

after January 1, 2000. SB 1016, which passed in 2008, now requires the 50% diversion requirement to be calculated in a per capita disposal rate equivalent.

Public utilities are under the jurisdiction of the California Public Utilities Commission. According to California Public Utilities Code, Section 451, public utilities have an obligation to serve the public and are required by law to “furnish and maintain...service as necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.” As a result, utility providers are required by law to provide service to any member of the public living within the utility’s service area who has applied for service, is willing to pay for the service, and will comply with the applicable rules and regulations.

Local

On January 15, 2008, the City of Oxnard adopted a policy that ensures mitigation measures are imposed as part of approval of new development, so that the associated demand remains consistent with available supplies (the Water Neutrality Policy). The net result of this policy is that project approvals include conditions that: a) control the pace of construction of any given project (and thus the pace at which water demand increases); b) allow participation in the contribution toward the development of additional water supplies that offsets the demand associated with the project; or c) suspend project approval until sufficient supplies are available to support the anticipated project demand. The Water Neutrality Policy requires all new development approved within the City to offset the water demand associated with the project with a supplemental water supply. New development includes all planned (anticipated in the 2030 General Plan) and any unplanned future development. Under the policy, a development can be water neutral by meeting its projected demand through one or more of the following:

- Transfer of existing FCGMA groundwater allocations to the City;
- Contributing to increased efficiency by funding City water conservation programs;
- Funding recycled water retrofit projects; or
- Providing additional water supplies.

The City of Oxnard Municipal Code, Articles VIII, *Water Waste*, and IX, *Water Conservation and Water Shortage Response Procedures*, contains permanent water conservation standards to maximize water use efficiency for non-shortage conditions and provide response actions implemented during water shortage conditions. Pursuant to the Oxnard Municipal Code, during a declared water shortage condition the water sources available to the City will be put to the maximum beneficial use to the greatest extent possible. The primary purpose of Article IX of the Oxnard Municipal Code is to provide response actions for use during water shortages, including procedures that will significantly reduce the consumption of City water over an extended period of time. The aim is to extend the water available to City residents while reducing the hardship on the City and the general public to the greatest extent possible. Pursuant to Article IX of the Oxnard Municipal Code, upon determining the severity of the water shortage emergency, the City Council will establish, by resolution, water conservation goals by stages.

Immediately after adoption of a City Council resolution declaring the water conservation goals, water allocations will be in effect and customers will be prohibited from using water in excess of their allocation. Each customer will be solely responsible for managing his/her water uses in such a manner as to not exceed the amount of water allocated. Percentage reduction stages and goals will be in effect with the first full billing period commencing on or after the effective date of the City Council resolution adopting a water shortage plan. During a water shortage emergency, the City Manager will take specific actions in response to the failure of any customer to comply with established water use restrictions.

The FCGMA established a series of water management policies and programs that are intended to protect the long-term integrity and reliability of the local groundwater resources within its jurisdiction. Ordinance 8.1 is FCGMA’s primary regulatory tool for achieving its goals, but has also adopted several resolutions. The FCGMA’s primary groundwater preservation program is embodied in its comprehensive ordinance code, requiring: a) all groundwater wells to be registered with the agency, b) all groundwater use to be reported to the agency, and c) limits on the amount of groundwater that may be pumped from within the agency’s jurisdiction without the payment of a pumping surcharge (financial payment currently set at \$725 per acre foot). Emergency Ordinance E

requires additional pumping restrictions within the FCGMA boundary and currently restricts the use of groundwater conservation credits.

The relevant goals and policies applicable to new schools within the City, water supply, stormwater drainage, gas and electric utilities, and water resources as described in Chapter 4 of the City of Oxnard 2030 General Plan (2011) are described as follows.

Chapter 4 Infrastructure and Community Services

- **ICS-1.2, Development Impacts to Existing Infrastructure:** Review development proposals for their impacts on infrastructure (e.g., sewer, water, fire stations, libraries, streets) and require appropriate mitigation measures to ensure that proposed developments do not create substantial adverse impacts on existing infrastructure and that the necessary infrastructure will be in place to support the development.
 - **Goal ICS-11:** Water supply, quality, distribution, and storage adequate for existing and future development.
 - **ICS-11.6, Water Conservation and/or Recycling Connection as Mitigation:** Require the use of water conservation offset measures (efficient low flow fixtures and irrigation systems, drought tolerant landscaping, leak detection programs, water audits, and public awareness and education programs) and/or proportional contributions to recycled water production and/or conveyance infrastructure related to the GREAT Program as mitigation for water supply shortage as determined by a Water Supply Assessment, CEQA documentation, or similar analysis as part of new or master plan development review.
 - **ICS-11.7, Water Wise Landscapes:** Promote water conservation in landscaping for public facilities and streetscapes, residential, commercial and industrial facilities and require new developments to incorporate water conserving fixtures (low water usage) and water-efficient plants into new and replacement landscaping.
 - **ICS-11.10, Water Supply Finding for Smaller Projects:** Prior to approval of a discretionary proposed project not subject to a Water Supply Assessment pursuant to Government Code Section 66473.7, a finding shall be made to ensure an adequate water supply for the proposed development.
 - **ICS-11.12, Water for Irrigation:** Require the use of non-potable water supplies for irrigation of landscape and agriculture, whenever available.
 - **Goal ICS-12:** Adequate capacity at the City Waste Water Treatment Plant to accommodate existing and future development.
 - **ICS-12.3, Wastewater Discharge Monitoring:** Monitor and ensure that discharges comply with approved permits.
 - **ICS-12.5, Sedimentation Control:** Require by conditions of approval that silt and sediment from construction be either minimized or prohibited.
 - **ICS-12.6, Timing of Future Development:** Impose conditions in order to ensure adequate wastewater capacity for proposed new development.

3.15.2 Impact Analysis

3.15.2.1 Methodology

Project impacts to utilities and service systems were evaluated based on information about water supply and associated conveyance infrastructure; wastewater conveyance and treatment infrastructure; storm drain infrastructure; and solid waste disposal systems, described within the Phoenix Civil Engineering, Inc. *Oxnard School District – Doris Avenue/Patterson Road Educational Facilities – Project Water Resource System Analysis* (2017) (Appendix J), TCSP's *Water Supply Assessment* prepared by Milner-Villa Consulting in August 2014, and the *Teal Club Development Infrastructure Review* prepared by Kennedy/Jenks in 2007.

3.15.2.2 Significance Thresholds

The significance criteria for this analysis is from Appendix G of the State CEQA Guidelines. The proposed project would result in a significant impact if it would:

- Exceed wastewater treatment requirements of the applicable regional water quality control board.
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Not have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

3.15.2.3 Project Impacts

Would the project exceed wastewater treatment requirements of the applicable regional water quality control board?

The proposed project would generate an estimated 5,130 gallons of domestic wastewater per day with an approximate flow rate of 10.7 gpm. The domestic wastewater would flow to the OWTP, where it would be treated pursuant to the Los Angeles RWQCB requirements. The OWTP has a current capacity of 31.7 mgd with average daily flows of approximately 24.0 mgd. Therefore the OWTP has sufficient treatment capabilities to address domestic wastewater from the proposed project. The proposed project would not exceed wastewater treatment requirements of the applicable regional water quality control board and project impact would be less than significant.

Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. Water for the proposed project would be supplied by the City of Oxnard from an existing 12 inch diameter potable water pipeline that is located within Doris Avenue that extends west from Ventura Avenue to the intersection of Doris Avenue and Patterson Road. It supplies water to the residential tract to the north of the project. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows;

- School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gallons per day [gpd]); and
- Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gpd).

That equates to approximately 2,450 gallons per hour (19,500 gallons/8 hours) assuming an 8 hour day for school occupancy and that the irrigation activities will occur during an 8 hour period at night. The school would be sufficiently supplied by the existing 12 inch diameter water pipeline for this flow rate. No additional pipeline improvements are needed for the potable water system (Phoenix 2017).

Project Memorandum (PM) 2.3 of the City of Oxnard, Public Works Integrated Master Plan (Master Plan) (Carollo Engineers 2015) describes the impacts to the City's water distribution system associated with the projected fire flow demands city-wide. For fire flow for the proposed school, the Master Plan assumed that the facility will be constructed using fire sprinklers. Table B105.1 in the California Building Code (CBC 2016) indicates that a fire flow of 3,000 gallons per minute for 3 hours is required for a building with construction Type IIA (commonly found in new school buildings). A 3,000 gpm flow rate yields a velocity of 8.5 feet per second (fps). Although this is slightly more than the recommended maximum of 7 fps, the duration is short. Therefore, the

existing pipeline is adequate for the potable water and firefighting demands of the school. No additional off-site pipeline infrastructure is required to meet the fire demands of the proposed project (Phoenix 2017).

The proposed project has the capability of taking recycled water from the City's Phase 1A backbone system pipeline located along N. Ventura Road for irrigation use. The pipeline originates at the Advanced Water Purification Facility (APWF) in the southern area of Oxnard that extends to the River Park development at the north end of the City. PM 4.2 of the Master Plan (Carollo Engineers 2015), indicates that the backbone pipeline is 14.5 inches in diameter. The OSD could offset the irrigation demand of the project by extending the recycled water infrastructure to the project site, requiring a pipeline approximately 3,300 feet long. An 8 inch diameter pipeline would be required to meet the proposed project irrigation demands (Phoenix 2017; Carollo Engineers 2015).

The project site is approximately 25 acres in size with irrigated areas accounting for approximately 12.8 acres or 48% of the site area. The irrigation demands for existing and future developments are identified in the Master Plan (Carollo Engineers 2015) with magnitudes greater than the proposed project. Assuming a 50% indoor/50% outdoor use split, the irrigation demand would be 750 gpd/ac (1,500 gpd/ac listed in the Master Plan for schools divided by 2), which equates to a potential recycled water demand for the school site of 3.5 AFY (3 irrigation days per week for 40 weeks – assumed due to mild climate over 12.8 acres converted to AFY). This would require a recycled water pipeline extension from N. Ventura Avenue to the project site to serve recycled water to the irrigation system. This would reduce the proposed project potable water demand by 61% (3.5/5.7 AFY) (Phoenix 2017; Carollo Engineers 2015).

The OWTP has a current capacity to treat 31.7 mgd of wastewater with average daily flows of approximately 24.0 mgd. The City anticipates expansion of the plant to 39.7 mgd by 2020. There currently is and will be sufficient capacity to accommodate the wastewater flows from the proposed school project, as well as from other planned developments (Kennedy/Jenks Consultants, 2007). Therefore, the City of Oxnard has adequate capacity to serve the additional wastewater flow that is anticipated from the proposed project and project impact would be less than significant.

Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The 2003 Drainage System Master Plan identified the necessary storm drain infrastructure needed to serve the Teal Club Specific Plan area that includes the project site. This was prior to the implementation of the MS4 requirements in the late 2000s. Those requirements further restricted developments from direct discharge of stormwater without treatment and/or detention or retention on-site (Phoenix 2017).

The 2003 Drainage System Master Plan recommended improvements in the area of the project Site including storm drainage piping on the east side of Patterson Road from Doris Avenue to Teal Club Road. The proposed facilities are a 30 inch diameter reinforced concrete pipe extending approximately to the southern boundary of the proposed project, and a 36 inch diameter reinforced concrete pipe extending to approximately 250 feet from the intersection with Teal Club Road. At Teal Club Road, the storm drainage system would transition to a 42 inch diameter reinforced concrete pipe. These facilities have not been constructed (Phoenix 2017).

The proposed project would incorporate the requirements of the Ventura County TGM (2015), including the detention of the anticipated storm flows generated from certain storm events as well as proprietary filtration systems as part of the post construction best management practices. On-site hydrodynamic treatment systems will treat the stormwater prior to discharge to the off-site system. The proposed project anticipates having to install the identified storm drainage piping infrastructure along Patterson Road from the Project site to the existing Teal Club Road facility.

The proposed 25-acre project site would include approximately 12.8 acres of pervious areas (48% of the site area, with the remainder comprised of hardscape (pavement, parking lots, and structures). Curb and gutter improvements would be installed along the north and south sides of the project site. A paved access road would

be installed along on the east side of the project site with curb and gutter along the west side. These improvements would route stormwater around the parcel from adjacent areas. Post construction BMPs would be employed to manage the storm flows generated by the hardscape project areas. Stormwater improvement at the project site would be designed in accordance with the Ventura County TGM (2015). BMPs such as a dry extended detention basin coupled with hydrodynamic separation devices for the parking lot areas will be used (Phoenix 2017).

The following 24 hour rainfall events for the project site area are listed in the 2017 Ventura County Hydrology Manual:

- 10 year = 4.01 inches;
- 25 year = 4.81 inches;
- 50 year = 5.39 inches; and
- 100 year = 5.97 inches (Phoenix 2017).

Soccer fields occupying an area of 6.7 acres are planned for the southern portion of the project site. The soccer fields would be constructed to collect and detain the storm runoff from the project area by being depressed 8 inches below the surrounding grade or conversely an 8 inch tall earthen berm would be constructed along the western, eastern and southern boundaries. The soccer field area would capable of collecting 195,640 cubic feet (4.5 acre feet) of runoff. This runoff could be detained for up to two days and then the remainder released to the existing agriculture ditch or concrete pipe system recommended in the 2003 Drainage System Master Plan. Preliminary calculations indicate that 5 acre feet of runoff would be generated by a 100 year storm event. The project site could detain that volume with only 0.5 acre feet of runoff discharged off-site (Phoenix 2017).

The parking lot areas would drain to the soccer field detention areas. Stormwater runoff from the parking lot areas would be filtered to collect the trash, debris and oil/petroleum products out of the runoff prior to discharge onto the soccer field detention areas. Each parking lot area would have an individual device for treating stormwater runoff from that specific area. The hydrodynamic filter systems will be identified as part of the project design efforts. Rooftop runoff will be concentrated in gutters and directed to nearby landscape areas located within the campus to promote percolation whenever possible (Phoenix 2017).

Since buildout of the project site was anticipated in the 2003 Drainage System Master Plan and would fulfill the requirements of MS4, the proposed project would not result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects and project impact would be less than significant.

Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?

The City of Oxnard would provide water for the proposed project as part of annexation to the City. The City of Oxnard obtains water from local groundwater, groundwater from the UWCD, and imported water from CMWD. The City of Oxnard's historical water supply has fluctuated between 26,919 and 28,826 acre feet per year or an upper limit of 25 million gallons per day (Phoenix 2017). The projected water supplies in the City of Oxnard 2015 Urban Water Management Plan are 40,341 acre feet for 2020, and 54,341 acre feet for 2025, 2030, 2035, and 2040 (MNS Engineers, Inc. 2016).

The CMWD is a wholesale supplier of water to the City of Oxnard. CMWD purchases water from the Metropolitan Water District of Southern California (MWD). Through annexation to the City of Oxnard, the project would be annexed to CWMD and therefore to the MWD as well, and MWD's approval of the annexation is required (CMWD 2016).

Land on which the proposed projects would be built is not presently within the boundaries of CMWD or MWD. The Administrative Codes of both agencies state that water delivered by their systems may be used only within their respective service area boundaries. CMWD purchases all of its potable water from MWD. MWD supplies water from the Colorado River and the State Water Project for municipal, industrial and agricultural uses within its

service area. Annexation to CMWD and MWD of the land under consideration is necessary to allow annexation to and water service by the City of Oxnard (CMWD 2017).

Annexation procedures for MWD are defined in Section 3500 of the Metropolitan Water District Act, which are also observed by CMWD. In addition, annexations to CMWD are subject to Part 8 of CMWD's Administrative Code. Annexation is also subject to approval by the Ventura Local Agency Formation Commission and any terms and conditions the Commission may apply. Pursuant to Section 56017 of Part 1, Chapter 2, of the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, annexation means the annexation, inclusion, attachment, or addition of territory to a city or district. This action will require amendment of the Spheres of Influence of CMWD and MWD (CMWD 2017).

CMWD and MWD have in place Water Standby Charges. In the course of annexation, such charges will be fixed for the subject property. Water Standby Charges are assessed to pay for the benefits that properties receive from the projects and facilities provided by CMWD and MWD, whether or not they receive water from CMWD and MWD (CMWD 2017).

This administrative change in water service areas would have a less than significant impact (CMWD 2017).

The City of Oxnard 2030 Master Plan indicates that the City has already exceeded the reduction limits established by the State of California 2010 Urban Water Management Plan (UWMP) assuming the mandated 132 gallons per capita per day (gpcd) value was used. The use of the mandated consumption value for planning purposes was conservative (City of Oxnard 2011).

The project site is currently in active agriculture use and is planted with row crops. The estimated annual water demand for property with similar agricultural use is approximately 3.2 AFY per acre (Milner-Villa 2014). The proposed project is 25 acres. Therefore, the estimated current agricultural water demand for the project site is 80 AFY. This current demand is served by private wells located on the property.

The City of Oxnard 2030 Master Plan uses a demand of 1,500 gallons per day per acre as the planning level consumption for school sites. This is based on the average water consumption of school sites located in the City and increased to account for future fluctuations. The daily flow rates associated with the operation of the proposed project are approximately 37,500 gallons per day (1,500 gpd/ac x 25 ac) that would be consumed as follows:

- School site is 13 acres of buildings/hardscape (1,500 gpd/ac x 13 ac = 19,500 gpd); and
- Irrigation uses constitute 12 acres (1,500 gpd/ac x 12 ac = 18,000 gpd) (Phoenix 2017).

Using the City of Oxnard 2030 Master Plan assumptions presented above and assuming a standard school year education schedule of 181 days, the school site building/hardscape water usage would be 19,500 gpd x 181 days per year = 3,529,500 gallons per year (10.8 AFY). Assuming that the irrigated areas of the school required irrigation 3 days per week for 40 weeks per year, the irrigated area water usage would be 18,000 gpd x 3 days/week x 40 weeks/year = 2,160,000 gallons per year (6.6 AFY). The total estimated annual project water usage would be 17.4 AFY, which is 22% of the current estimated water demand under agricultural land use of 80 AFY.

The City of Oxnard's Water Neutrality Policy was first established in 2008 and reaffirmed in 2011. The Water Neutrality Policy requires that all new development approved within the City must offset the water demand associated with the project with a supplemental water supply. As noted above, "new development" includes all planned (anticipated in the 2030 General Plan) and any unplanned future development occurring in the City. Under the policy, a development can be water neutral by meeting its projected demand through: existing FCGMA groundwater allocations that are transferred to the City; contributing to increased efficiency by funding water conservation or recycled water retrofit projects; providing additional water supplies; or any combination of these options. While this City policy has not been codified, it has been applied to every development project approved since 2008.

The City of Oxnard's Water Neutrality Policy would require the OSD to demonstrate access to water supplies that meets or exceeds projected demands. The proposed project would achieve neutrality through contributing water rights, water supplies, or financial or physical offsets to the City of Oxnard that would ensure adequate water supply to address Project water demands. This may be achieved through transfers of FCGMA groundwater allocations to the City of Oxnard through agricultural conversion, contributing to expansions of the City's recycled water system through physical or financial contributions, and participation in water conservation projects that produce measurable sustainable water savings. Non-potable water demands, to be met with City recycled water, would be separate. A primary goal is to ensure that the proposed project water supplies consist of 100% local and sustainable sources including local groundwater and recycled water.

The OSD anticipates compliance with the City's Water Neutrality Policy. The OSD will transfer groundwater allocations to the City upon final approval of the project. The FCGMA Ordinance Code allows an allocation of 2 acre-feet per year per acre for converting historical agricultural groundwater allocations to municipal allocations (FCGMA Ordinance Code, Section 5.3.3). In addition, the conversion rate of 2 acre-feet per year is also subject to a reduction of 25% as per FCGMA Ordinance Code, Section 5.4. Therefore, the applicant will transfer approximately 37.5 AFY to the City (25 ac project area x 2 AFY/ac x 0.75). This transfer of historical groundwater extraction allocations is greater than the total estimated annual project water demand (i.e., 17.4 AFY). Therefore, the project would have sufficient water supplies available to serve the project from existing entitlements and resources the project impact would be less than significant.

Would the project result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The OWTP has a current capacity to treated 31.7 mgd of wastewater with average daily flows of approximately 24.0 mgd. The City anticipates expansion of the plant to 39.7 mgd by 2020. There would be sufficient capacity to accommodate the wastewater flows from the proposed project, as well as from other planned developments (Kennedy/Jenks Consultants 2007). Therefore, project impact would be less than significant.

3.15.2.4 Cumulative Impacts

The analysis provided is cumulative in nature and considers the demand for water from existing and future development in the City. The planned sources of water supply would be sufficient to accommodate projected citywide demand; therefore the cumulative impacts to water supply would not be significant. Additionally, the proposed project and all future development projects in the City will be required to comply with standard water conservation requirements of the City, State, and California Building Code. These include the use of low-flush toilets and urinals, compliance with statewide efficiency standards for shower heads and faucets, and insulation of pipes to reduce water used before hot water reaches equipment or fixtures. The contribution of the proposed project would not be cumulatively considerable.

The demands on the OWTP would continue to increase with construction of cumulative projects. The plant currently has the capacity to accommodate up to 31.7 mgd (with 7.7 mgd of available capacity) and treatment plant upgrades that would not generate additional capacity are currently in the planning process. Therefore, the current capacity of the OWTP is sufficient to serve planned and pending development. The City general fund monies and wastewater treatment connection fees provide revenue for the necessary replacement and improvements to the wastewater treatment plant. Therefore, cumulative impacts relating to the local wastewater system are considered less than significant.

3.15.2.5 Mitigation Measures

No Mitigation Measures are required.

3.15.2.6 Level of Impact After Mitigation

No Mitigation Measures are required; project impact would be less than significant.

4.0 OTHER CEQA CONSIDERATIONS

4.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGE

According to the CEQA Guidelines, “uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the proposed project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new schools would require the commitment of resources that include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and people to and from the project site. Consumption of these resources would occur with any development in the region and is not unique to the proposed project. It is not anticipated that the development of the project would significantly affect local or regional resource supplies.

Implementation of the proposed project would result in the conversion of agricultural land into educational uses, resulting in a permanent loss of 25 acres of Farmland of Statewide Importance. Since this conversion would be extremely unlikely to be reversed, it would represent an irreversible environmental effect of the proposed project on agricultural resources. As identified in Section 3.2 of this EIR, this would be a significant unavoidable impact of the proposed project at a project level and cumulative basis. Therefore, the proposed project would result in significant unavoidable long-term operational impacts related to a nonrenewable resource. No feasible mitigation measures are available to adequately offset such impacts to a nonrenewable resource.

The additional vehicle trips associated with the proposed project would incrementally increase local traffic, noise levels and regional air pollutant emissions. With the implementation of mitigation measures, impacts associated with increase local traffic, noise levels and regional air pollutant emissions would be less than significant.

As discussed in Section 3.5, Cultural and Tribal Cultural Resources, the proposed project has the potential to impact unknown sensitive cultural and tribal cultural resources on the project site. With the implementation of mitigation measures, impacts associated with cultural and Tribal cultural resources would be less than significant.

Title 24 of the California Administrative Code regulates the amount of energy consumed by new development. Nevertheless, the consumption of such resources would represent a long-term commitment of those resources. The commitment of resources required for the construction and operation of the proposed project would limit the availability of such resources for future generations or for other uses during the life of the project. However, continued use of such resources is consistent with the anticipated growth and planned changes on the project site and within the general vicinity.

4.2 GROWTH-INDUCING IMPACTS

Pursuant to the CEQA Guidelines (Section 15126.2(d)): an EIR must address whether a project will directly or indirectly foster growth as follows: “[An EIR shall] discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of wastewater treatment plant, might, for example, allow for more construction in service areas).

Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also, discuss the characteristic of some projects, which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

As discussed below, this analysis evaluates whether the proposed Project would directly or indirectly induce economic, population, or housing growth in the surrounding environment.

Direct Growth-inducing Impacts in the Surrounding Environment

Direct growth-inducing impacts occur when the development of a project induces population growth or the construction of additional developments in the same area of a proposed project, and produces related growth-associated impacts. Growth-inducing projects remove physical obstacles to population growth, such as the construction of a new road into an undeveloped area, a wastewater treatment plant expansion, and projects that allow new development in the service area. Construction of such infrastructure projects are considered in relation to the potential development and the potential environmental impacts.

The proposed project would not directly induce growth as it does not involve residential development. School uses are considered growth accommodating uses, instead of growth-inducing, as new schools are typically built in order to serve the educational needs of the existing and forecast populations. The proposed new elementary (K-5), middle school (6-8) and District administrative center are needed to accommodate existing and anticipated future enrollment in the District. In addition, the proposed project would not remove obstacles to regional growth and related development. Therefore, no significant impacts related to growth inducement would occur.

Indirect Growth-Inducing Impacts in the Surrounding Environment

The proposed project would not indirectly induce growth through substantial increase in employment opportunities or an employment-related increase in population. Construction workers for the proposed project are expected to be drawn from the local labor pool. During operation, the proposed project would have approximately 239 employees. Although it is expected that most of these opportunities would be filled by residents of communities adjacent to the project site, the proposed project could indirectly result in a minimal growth in population of the immediate area. This minimal growth would not represent unplanned population growth in the community or result in economic growth that exceeds levels anticipated in plans adopted by the City. Therefore, no significant impacts related to growth inducement would occur.

4.3 ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

This EIR evaluates the potential environmental impacts of the proposed project and identifies mitigation measures that would avoid, reduce or minimize impacts when feasible. For almost all of the significance criteria, potential impacts would be mitigated to less than significant. However, the proposed project would result in significant unavoidable impacts in the following three areas:

Agriculture (converting Farmland of Statewide Importance to non-agricultural use)

Implementation of the proposed project would result in the development of agricultural land into school uses. The permanent loss of 25 acres of Farmland of Statewide Importance would result in a significant impact. While City policies encourage establishment of a farmland protection program and use of conservation easements and land banking to protect continued agricultural uses throughout the City’s SOI, presently the City does not utilize a banking or fee approach to mitigate impacts to agricultural soils or lands (City of Oxnard 2009). The City also has policies and programs that support existing agricultural buffers (such as the SOAR Ordinance) in order to reduce or slow further loss of agricultural resources, however, these policies do not offset an actual loss of farmland acreage. No additional feasible mitigation measures are currently available to reduce this impact to a less than significant level, therefore this impact would remain significant and unavoidable (City of Oxnard 2009).

Airport Hazards

An aircraft accident can occur at any time and at any place. An accident within or near the project site could involve an aircraft taking off from or landing at Oxnard Airport or it could involve an aircraft enroute between two other airports, with no connection to Oxnard Airport. There is no way to completely guard against such occurrences. We can, however, assess the relative probability of an accident occurring within a specific area. One method of estimating aircraft accident potential within or immediately adjacent to the project site resulted in a probability of an occurrence every 462 years. However, there are no “standards” that specifically address this issue. Only local decision-makers can determine if this level of probability is acceptable to a proposed school within the Oxnard community.

The City of Oxnard CEQA Guidelines does identify a risk matrix for upset hazards. Based on this criteria, criticality classifications of upset hazards from an accident could range from negligible to disastrous. A probability of an occurrence every 462 years would have a frequency classification of unlikely (Between once in 100 and once in 10,000 years). An event that could result in no injuries or a few minor injuries would be classified less than significant. An event that could result in up to 10 severe injuries or greater would be classified as significant. (Oxnard 2017). In order to account for the “worst-case scenario” project impact from airport hazards would therefore be considered potentially significant and unavoidable.

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5.0 ALTERNATIVES

5.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS FOR ALTERNATIVE ANALYSIS

This section discusses the alternatives to the Doris Avenue/Patterson Road Educational Facilities Project that would potentially avoid or lessen the significant environmental impacts while obtaining most of the basic Project Objectives. Sufficient information about each alternative is included to allow meaningful evaluation, analysis, and comparison with the project. Per Section 15126.6(d) of the CEQA Guidelines, potential significant effects of the alternatives are discussed in less detail than the significant effects of the project as proposed.

Sections 15126.6(a) through 15126.6(f) of the State CEQA Guidelines (14 CCR) provide guidance on the alternatives to a project that must be evaluated in an Environmental Impact Report (EIR). Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (*California Public Resources Code*, Section 21002.1), the discussion of alternatives must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

An EIR must describe a range of reasonable and of potentially feasible alternatives to the project, or to the location of the project, which would feasibly attain most of the basic Project Objectives but would avoid or substantially lessen any significant effects. The comparative merits of the alternatives must be evaluated.

An EIR need not consider every conceivable alternative, but it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The range of alternatives is governed by a “rule of reason” that requires discussion of only those alternatives necessary for the Oxnard School District (Lead Agency) to make a reasoned choice.

Key provisions of the CEQA Guidelines on alternatives (Section 15126.6[b] through [f]) are summarized below to explain the foundation and legal requirements for the alternatives analysis in the EIR:

- The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (15126.6[b]).
- The range of potential alternatives to the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as , the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as (15126.6[d]).
- The specific alternative of “no project” shall also be evaluated along with its impact (15126.6[e][1]). The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would

be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (15126.6[e][2]).

- The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making (15126.6[f]).
- For alternative locations, “Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR” (15126.6[f][2][A]).
- If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR (15126.6[f][2][B]).
- An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (15126.6 [f][3]).

Pursuant to the CEQA Guidelines previously summarized, a reasonable range of alternatives to the project was considered and evaluated in this Final EIR.

5.2 PROJECT OBJECTIVES

The objectives of the proposed project include the following:

- Accommodate existing and projected future student enrollment within the District
- Provide new facilities that meet the District’s educational specifications
- Provide a new K-5 School to accommodate 700 students in permanent classroom facilities
- Provide a new 6-8 School to accommodate 1,200 students in permanent classroom facilities
- Build and maintain schools that reflect the wise and efficient use of limited land resources
- Provide new District administrative facilities

5.3 SUMMARY OF THE PROJECT AND SIGNIFICANT IMPACTS

5.3.1 Summary of Project

The OSD proposes to construct and operate joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The project site is located within unincorporated Ventura County and within the City of Oxnard SOI area.

Reorganization

The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura LAFCo approval of several changes of organization, collectively called reorganization. The following LAFCo actions would be necessary components of the reorganization:

- Annexation to the City of Oxnard
- Annexation to the Calleguas Municipal Water District
- Annexation into Metropolitan Water District of Southern California
- Detachment from Oxnard Drainage District 1
- Detachment from the Ventura County Resource Conservation District
- Detachment from the Ventura County Fire Protection District

- Detachment from Ventura County Service Area No. 32
- Detachment from Ventura County Service Area No. 33

As part of the reorganization process, sphere of influence amendments will also be needed. Anticipated amendments include the following:

- Amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and Agricultural land to the west.
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west.
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area.

The District will process a GPA, Pre-Zone (RZ) and a Reorganization and SOI amendments through the City of Oxnard. The proposed General Plan land use designation is School and the proposed zoning designation is C-R. Schools are an allowed use within the C-R zone with approval of the special use permit (Oxnard Municipal Code Section 16-257). The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the reorganization and sphere amendments by LAFCo, and a 30-day reconsideration period, the reorganization will be recorded and the site will be annexed into the City of Oxnard and the Calleguas Water District and eligible for all public services.

School Facilities

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students on-site. In total, the proposed project would comprise approximately 178,678 sq. ft. of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 students on-site. These facilities include a separate playground for the kindergarten with play structures and open space. There will be lower and upper grade play areas with hard courts for tether ball, basketball, and volleyball and motor skill development as well as play structures. Grass fields will be used for kickball, soccer, softball, track and field challenges, and general play. The elementary school will have a multi-purpose room for some indoor recreational activities during inclement weather and potential after hours community use. An additional drop-off area for the play field area is provided along Patterson Road.

5.3.2 Alternatives Considered and Rejected

Section 15126.6(c) of the *CEQA Guidelines* suggests that an EIR identify alternatives that were considered for analysis but rejected as infeasible, then briefly explain the reasons for their rejection.

According to the CEQA Guidelines, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts.

During the project scoping period OSD received public comments suggesting that the District increase the development intensity at existing school sites as a potential alternative. However, as indicated in the Master Construct and Implementation Program, the District has and continues to make facilities upgrades at District schools. This alternative would not meet the project objectives of providing a new K-5 school to accommodate 700 students in permanent classroom facilities or provide a new 6-8 school to accommodate 1,200 students in permanent classroom facilities. Therefore, it would be considered but rejected.

5.3.3 Alternatives To The Proposed Project

Alternatives considered in this EIR include:

- No Project Alternative – This alternative assumes that improvements described for the proposed project would not be implemented. OSD would not implement any changes to the project site that would result in changes to existing project site or existing agricultural uses. Under the No Project Alternative it is assumed that increases in enrollment would have to be accommodated by existing OSD schools.
- Reduced Project Use Alternative – Under the Reduced Project Alternative, total student capacity would be reduced by more than 20% as follows: 900 middle school students in grades 6-8 and 600 elementary school students in grades K-5. With the reduction in capacity, there would be a proportional reduction in classroom square footage. Support facilities (e.g., multipurpose room, food services, library, administration) would also be reduced in size. It is assumed that there would be an overall decrease in square footage by 15%. There would be no change to the District Office component.

5.3.3.1 No Project Alternative

According to the *CEQA Guidelines* (Section 15126.6(e)(3)(b)), the No Project Alternative is defined as the “circumstance under which the project does not proceed.” Section 15126.6(e) of the *CEQA Guidelines* requires analysis of a No Project alternative that (1) discusses existing site conditions at the time the NOP is prepared or the EIR is commenced, and (2) analyzes what is reasonably expected to occur in the foreseeable future based on current plans if the proposed Project were not approved. Under the No Project Alternative, the proposed Project would not be implemented and the current General Plan Land Use and zoning designations for the Project site would not be amended to allow for the proposed Project. There would be a continuation of the existing agricultural land use. Potential impacts for the No Project Alternative are discussed as follows.

Aesthetics

Under this alternative, the project site would remain under agricultural production and would not include any new type of development or uses on the project site. There would be no obstruction of views of the Ventura-Oxnard Greenbelt, there would be no change to the visual character of the site, and there would be no new sources of light or glare. There would be no impact to aesthetic resources. Impacts would be reduced in comparison to the proposed project.

Agricultural

Under this alternative, the project site would remain under agricultural production and there would be no loss of Farmlands of Statewide Importance. There would be no impact to agriculture. Impacts would be reduced in comparison to the proposed project.

Air Quality

Implementation of this alternative would not create new sources of regional air emissions. There would be no impact to air quality. Impacts would be reduced in comparison to the proposed project.

Biological Resources

The project area has been disturbed by agricultural activities and little if any suitable habitat for sensitive wildlife exists on the project site. Since no changes to land uses are proposed under this alternative, no impacts to existing biological resources on or surrounding the project site would occur. Impacts would be reduced in comparison to the proposed project.

Cultural and Tribal Cultural Resources

The project area has been disturbed by agricultural activities. This alternative would not include any new type of ground-disturbing activities or involve removal of any cultural resources. No impacts to cultural resources or tribal resources would occur. Impacts would be reduced in comparison to the proposed project.

Geology and Soils

Under this alternative, the project site would remain under agricultural production and would not include any new type of development on the project site. This alternative would not expose people or structures to any geological hazards or result in new activities resulting in soil erosion. There would be no impacts associated with geology and soils. Impacts would be reduced in comparison to the proposed project.

Greenhouse Gas Emissions

This alternative does not include uses that would create new sources of regional air emissions and contribute to global climate change. There would be no impact associated with greenhouse gas emissions. Impacts would be reduced in comparison to the proposed project.

Hazards and Hazardous Materials

Under this alternative, the project site would remain under agricultural production and would not include any new type of development on the project site. This alternative would not involve new activities that would expose people or structures to any hazards or hazardous materials. There would be no impacts associated with hazards or hazardous materials. Impacts would be reduced in comparison to the proposed project.

Hydrology and Water Quality

Under this alternative, the project site would remain under agricultural production and would not include any new type of development on the project site. This alternative would not result in new activities resulting in impacts to water quality, depletion of groundwater supplies, changes in drainage or water runoff, or exposure of people or structures to any flooding hazards. There would be no impacts associated with hydrology and water quality. Impacts would be reduced in comparison to the proposed project.

Land Use and Planning

This alternative would not involve any changes to the general plan or zoning designations on the project site. The project site would remain under the Ventura County General Plan land use designation of agricultural-urban reserve and a zoning designation of agricultural exclusive (AE-40). There would be no impacts associated with land use and planning.

Noise

This alternative would not introduce new land uses that would generate construction or operational noise that would increase the ambient noise levels in the surrounding area. No impacts to existing noise levels would occur. Impacts would be reduced in comparison to the proposed project.

Population

This alternative would not introduce new land uses that would generate population growth directly or indirectly. No impacts to population would occur. Impacts would be reduced in comparison to the proposed project.

Public Services

This alternative would not introduce new land uses that would create additional demands on public services at the project site. However, without the construction of new educational facilities, the District would have to accommodate existing and anticipated future students at other District schools that could result in adverse impacts to public schools. No impacts to public services would occur for police, fire, recreation or other public facilities. Impacts to public schools would be greater in comparison to the proposed project.

Transportation and Traffic

Under this alternative, development of the project site would not occur. The project site would remain predominately under agricultural production and traffic volumes in the surrounding area would not increase as a result of this alternative. This alternative would not have any impacts to the existing transportation system or

traffic volumes and no roadway improvements would be provided. Impacts would be reduced in comparison to the proposed project.

Utilities and Service Systems

This alternative would not introduce new land uses that would create additional demands on utilities and service systems. No impacts to utilities and service systems would occur. Impacts would be reduced in comparison to the proposed project.

Conclusion and Relationship to Project Objectives

The No Project Alternative would result in the continuation of existing conditions on the project site. This would be the environmentally superior alternative as no significant unavoidable impacts would occur if the project site were to remain under agricultural production. However, the five Project objectives would not be met.

5.3.3.2 Reduced Project Alternative

Under the Reduced Project Alternative, total student capacity would be reduced by more than 20% resulting in the following: 900 middle school students in grades 6-8 and 600 elementary school students in grades K-5. With the reduction in capacity, there would be a proportional reduction in classroom square footage. Support facilities (e.g., multipurpose room, food services, library, and administration) would also be reduced in size. It is assumed that there would be an overall decrease in square footage by 15%. There would be no change to the District Office component.

Aesthetics

Implementation of the Reduced Project Alternative would develop the same project site and acreage as the proposed project. This alternative would also require similar site improvements required for the proposed project; therefore, impacts to visual character of site would be similar to those identified for the proposed project.

The reduction of intensity may reduce the potential for obstruction of views of the Ventura-Oxnard Greenbelt and the amount of new sources of light or glare. Impacts under both this alternative and the proposed project would be less than significant. Impacts would be reduced in comparison to the proposed project.

Agriculture

Under this alternative, the permanent conversion of Farmland of Statewide Importance to non-agricultural uses would result in a significant unavoidable impact, the same as with the proposed Project. This impact would remain significant and unavoidable. Impacts to agricultural resources under this alternative would be the same as the impacts identified for the proposed project.

Air Quality

As with the proposed project, this alternative would not result in population growth above what is forecasted in the 2030 General Plan and in turn the 2016 AQMP. Therefore, the alternative would not conflict or obstruct implementation of the applicable 2016 AQMP and the impact would be less than significant.

The reduction of intensity would reduce the duration of construction activities associated with this alternative. However, impacts related to daily construction emissions would remain similar to the impacts identified under the proposed project since daily construction activities would be assumed to be similar to the proposed project, but would occur over a shorter overall duration due to the reduction of development. As with the proposed project construction-related impacts to air quality would be less than significant. This alternative would comply with Mitigation Measure AQ-1 to minimize fugitive dust emissions and to ensure compliance with CARB off-road regulations in accordance with Ventura County recommendations for construction emissions exceeding the county's thresholds of significance of 25 pounds per day for NO_x and SO_x.

Operations-related emissions impacts from this alternative would also be reduced in comparison to the proposed project since the 20% reduction in student numbers would reduce the amount of vehicle trips associated with

student drop-off and pickup. Due to the reduction of building space, there would also be a reduction with the emissions associated heating, cooling and upkeep of the buildings. As with the proposed project, operation-related impacts to air quality would be less than significant.

As with the proposed project, emissions from construction or operational sources would not be anticipated to expose sensitive receptors in the nearby residential area to substantial pollutant concentrations. The reduction of intensity under this alternative would further reduce these emissions. Overall, impacts would be reduced in comparison to the proposed project.

Biological Resources

Implementation of the Reduced Project Alternative would develop the same project site and acreage as the proposed project. This alternative would also require similar site improvements required for the proposed project; therefore, impacts to biological resources on the project site would remain the same as those identified for the proposed project (potential to affect nesting birds and disturbing on-site agricultural irrigation ditches). Mitigation measures similar to those identified in Section 3.4 would be required, which would reduce impacts related biological resources to less than significant levels. Impacts to biological resources under this alternative would be the same as the impacts identified for the proposed Project.

Cultural and Tribal Cultural Resources

Implementation of the Reduced Project Alternative would develop the same project site and acreage as the proposed project. This alternative would also require similar site improvements required for the proposed project. Thus, impacts to cultural resources on the project site would remain the same as those identified for the proposed Project (potential to impact unknown archaeological resources, human remains, and paleontological resources). Mitigation measures similar to those identified in Section 3.5 would be required, which would reduce impacts related to cultural resources to less than significant levels. Impacts to cultural resources under this alternative would be the same as the impacts identified for the proposed project.

Geology and Soils

The reduction of intensity would reduce the amount of people and structural square footage exposed to geological hazards as identified for the proposed project (strong seismic ground shaking, seismic-related ground failure including liquefaction, differential settlements, and lateral spreading, and expansive soils). Mitigation measures similar to those identified in Section 3.6 would be required, which would reduce impacts related to geological hazards to less than significant levels. Impacts would be reduced in comparison to the proposed project.

Implementation of the Reduced Project Alternative would develop the same project site and acreage as the proposed project, therefore potential soil erosion impacts associated with construction activities would be the same with this alternative. A mitigation measure similar to those identified in Section 3.6 would be required, which would reduce impacts related to soil erosion to less than significant levels. Impacts associated with soil erosion under this alternative would be the same as the impacts identified for the proposed project.

Greenhouse Gas Emissions

Under the Reduced Project Alternative, development intensity would be reduced, which would potentially reduce the number of vehicle trips. In addition, energy usage would be expected to be reduced through the reduction of approximately 15% of the square feet of school uses; therefore, the GHG emissions from this alternative would be reduced in comparison to the proposed project. Impacts under both this alternative and the proposed project would be less than significant. Impacts would be reduced in comparison to the proposed project.

Hazards and Hazardous Materials

The reduction of intensity would reduce the amount of people and structural square footage exposed to hazards and hazardous materials as identified for the proposed project. Mitigation measures similar to those identified in Section 3.8 would be required, which would reduce impacts related to hazards and hazardous materials to less

than significant levels, except for impacts associated with airport hazards. These hazards would be considered potentially significant and unavoidable. Impacts would be reduced in comparison to the proposed project.

Hydrology and Water Quality

Implementation of the Reduced Project Alternative would develop the same project site and acreage as the proposed project, therefore hydrology and water quality impacts associated with development of the site would be the same with this alternative (impacts to water quality associated with encountering perched groundwater and increased stormwater runoff from the project site). A mitigation measure similar to those identified in Section 3.8 would be required, which would reduce impacts to less than significant levels. Impacts associated with hydrology and water quality under this alternative would be the same as the impacts identified for the proposed project.

The reduction of intensity would reduce the amount of people and structural square footage exposed to dam flooding hazards as identified for the proposed project. Mitigation measures similar to those identified in Section 3.9 would be required, which would reduce impacts related to geological hazards to less than significant levels. Impacts would be reduced in comparison to the proposed project.

Land Use and Planning

The reduced project alternative would need the same discretionary and non-discretionary land use permits and approvals as the proposed project including GPA, Pre-Zone, Re-organization, and SOI amendments. Impacts associated with land use planning would be the same as the proposed project.

Noise

The reduction of intensity would reduce the duration of construction activities associated with this alternative. However, impacts related to construction noise impacts would remain similar to the impacts identified under the proposed project since daily construction activities would be assumed to be similar to the proposed project, but would occur over a shorter duration due to the reduction of development. Mitigation measures similar to those identified in Section 3.11 for the proposed project would be required, which would reduce construction-related impacts to less than significant.

Operations-related noise impacts from this alternative would also be reduced in comparison to the proposed project since the 20% reduction in student numbers would reduce the amount of vehicle trips associated with student drop-off and pickup. As with the proposed project, operation-related impacts to air quality would be less than significant. Impacts would be reduced in comparison to the proposed project.

Population

As with the proposed project, this alternative would support existing and future students and infrastructure improvements would not indirectly cause an increase in population growth and impacts would be less than significant. Impacts associated with population under this alternative would be the same as the impacts identified for the proposed project.

Public Services

Under the Reduced Project Alternative, the development density on the project site would be reduced and demands on public services would be reduced proportionately. Impacts to public services under the proposed Project are considered less than significant. Since, this alternative would reduce the intensity of land uses, thereby reducing the demand on public services, impacts to public services would be less than the impacts under the proposed project except for potential impacts on public schools. The reduced school capacity would require that additional students be accommodated elsewhere in the District. Therefore, impact on public schools would be greater than the proposed project.

Transportation and Traffic

The reduction of intensity would reduce the duration of construction activities associated with this alternative. However, impacts related to construction traffic impacts would remain similar to the impacts identified under the

proposed project since daily construction activities would be assumed to be similar to the proposed project, but would occur over a shorter duration due to the reduction of development. As with the proposed project, impacts would be less than significant.

Operations-related traffic impacts from this alternative would also be reduced in comparison to the proposed project since the 20% reduction in student numbers would reduce the amount of vehicle trips associated with student drop-off and pickup. Mitigation measures similar to those identified in Section 3.14 for the proposed project would be required, which would reduce operation-related impacts to less than significant. Impacts would be reduced in comparison to the proposed project.

Utilities and Service Systems

Under the Reduced Project Alternative, the development density on the Project site would be reduced and demands on utilities and service systems would be reduced proportionately. Impacts to utilities and service systems under the proposed project are considered less than significant. Since this alternative would reduce the intensity of land uses, thereby reducing the demand on water supply service systems, impacts to utilities and service systems would be less than the impacts under the proposed Project. Mitigation measures similar to those identified in Section 3.15 for the proposed project would be required, which would reduce impacts to less than significant. Impacts would be reduced in comparison to the proposed project.

Conclusion And Relationship To Project Objectives

The Reduced Project Alternative would result in a slight reduction in environmental impacts. However, most impacts are substantially similar to the proposed project and significant and unavoidable impacts related to agriculture and airport hazards would remain. This alternative would achieve most of the objectives of the proposed project but would accommodate 20% fewer students; therefore, would not fully achieve Project Objectives.

5.3.4 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. This would ideally be the alternative that results in fewer (or no) significant and unavoidable impacts. CEQA Guidelines Section 15126(d)(2) states that if the environmentally superior alternative is the No Project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

Table 5-1 provides a comparison of each alternative. The No Project Alternative would result in no impacts to any of the issue areas. The Reduced Project Alternative would reduce potential impacts of the proposed project, although would still result in significant and unavoidable impacts. The No Project Alternative would be the environmentally superior alternative, but would not meet any of the project objectives. The environmentally superior development alternative would likely be the Reduced Project Alternative since this alternative would result in slightly less impacts due to decrease of development intensity on the project site.

Table 5-1. Summary of Project Alternatives

Issue Area	Proposed Project	No Project	Reduced Project
Aesthetics	LTS	NI	LTS
Agriculture	S	NI	S
Air Quality	LTS/M	NI	LTS/M
Biological Resources	LTS/M	NI	LTS/M
Cultural and Tribal Cultural Resources	LTS/M	NI	LTS/M
Geology and Soils	LTS/M	NI	LTS/M
Greenhouse Gas Emissions	LTS	NI	LTS
Hazards and Hazardous Materials	S	NI	S
Hydrology and Water Quality	LTS/M		LTS/M
Land Use and Planning	LTS	NI	LTS
Noise	LTS/M	NI	LTS/M
Population	LTS	NI	LTS
Public Services	LTS	NI	LTS
Transportation	LTS/M	NI	LTS/M
Utilities and Service Systems	LTS	NI	LTS

NI = No Impact

LTS = Less Than Significant

LTS/M = Less Than Significant with Mitigation

S = Significant and Unavoidable

6.0 REFERENCES

6.1 ORGANIZATIONS AND PERSONS CONSULTED

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6.2 CITATIONS

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APPENDICES

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APPENDIX C: AIR QUALITY

APPENDIX D: CULTURAL RESOURCES (RECORDS SEARCH AND NATIVE AMERICAN CONSULTATION)

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APPENDIX G: PHASE I ENVIRONMENTAL SITE ASSESSMENT

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APPENDIX I: AIRPORT HAZARDS ANALYSIS

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A NOP/IS AND COMMENT LETTERS RECEIVED

**NOTICE OF PREPARATION (NOP)
OF AN ENVIRONMENTAL IMPACT REPORT AND
NOTICE OF PUBLIC SCOPING MEETING
DORIS PATTERSON EDUCATIONAL FACILITIES PROJECT**

Notice Is Hereby Given that Oxnard School District (OSD) will be the lead agency and will prepare an environmental impact report (EIR) for the proposed Doris Patterson Educational Facilities Project. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The scoping process is intended to provide OSD with the information the public feels is necessary to establish the appropriate scope for preparing the environmental analysis. Please submit your comments, input, suggestions for project alternatives, and any other pertinent information that may enable us to prepare a comprehensive EIR for the proposed project. The Notice of Preparation (NOP) comment period begins on **May 11, 2017 and ends on June 9, 2017**. Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but not later than 30 days after receipt of the notice.

Please submit written comments to:

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South "A" Street,
Oxnard, CA 93030

Project Title: Doris Patterson Educational Facilities Project

Project Location: Southeast corner of Doris Avenue and North Patterson Road, Ventura County, CA. The project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI), City Urban Restriction Boundary (CURB), and within the Oxnard Airport SOI. The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, State of California as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of 1,088,824.84 square feet (approximately 25 acres).

The project area is relatively flat and currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east, and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

Project Description: OSD proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The new school is needed to accommodate existing and anticipated future enrollment in the District. The project site is located within unincorporated Ventura County and within the City of Oxnard SOI area. The project will include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the

Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33.

Pursuant to Government Code Section 66428(a)(2), and in compliance with City of Oxnard Municipal Code Section 15-11, under a statutory exemption in the Subdivision Map Act, a tentative map is not required for property transferred to or from a government agency proceeding under Government Code section 66428(a)(2).

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with the Ventura Local Agency Formation Commission (LAFCo). Upon approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students onsite. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings. An additional drop-off area for the play field area is provided along Patterson Road. A conceptual site plan is included as Figure 2. The project site will have a drought tolerant landscape that meets the 2009 Model Water Efficiency Landscape Ordinance (MWELo) regulations adopted by the Department of Water Resources (DWR).

A two-story 23,665 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. An elementary school drop-off and pick-up area would separate the district office space from the elementary school buildings. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. The elementary school buildings are clustered together to the east of the District office area with primary access provided from Patterson Road. These buildings are anticipated to include:

- Multi-Purpose & Food Services (8,975 sq. ft.)
- 2-Story/ 23 Classroom Building (22,560 sq. ft.)
- Administration Building (3,005 sq. ft.)
- Media Center & Student Support Services (4,210 sq. ft.)
- Kindergarten (6,400 sq. ft.)

A parking lot with 42 spaces is provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces are provided within the drop-off and pick-up area to the west.

The middle school buildings are located near the northeast corner of the site and are anticipated to include:

- Administration Building (3,005 sq. ft.)
- Media Center (2,000 sq. ft.)
- Visual Arts & Music (3,200 sq. ft.)
- Student Support/Conference Center (3,800 sq. ft.)
- Food Services (3,900 sq. ft.)

- Two-Story/ 41 Classroom Building (45,312 sq. ft.)
- Science Building (2,600 sq. ft.)
- Restrooms (3,000 sq. ft.)
- Gymnasium (13,150 sq. ft.)

Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pick-up area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed access road is expected to terminate at the southernmost access to the parking lot for the school.

The proposed project includes utility connections including water, sewer, gas, electric, data/telecommunications, and storm water collection. Water, wastewater, and recycled water need to be extended to the site. Power is located on the east side of Patterson Road. The nearby residential neighborhood to the north of the site has phone and cable/communication facilities that would need to be extended to the site.

Phased construction is anticipated to begin in 2019 and each school would take approximately 15 to 16 months to construct. Operation of the new K-5 elementary school is anticipated for the 2020-2021 school year followed by the 6-8 middle school for the 2022-2023 school year.

Topics Identified for Study in an EIR. OSD prepared an Initial Study (IS). Based on the environmental review contained in the IS, OSD determined that implementation of the proposed project may have a significant effect on the environment and an EIR is required. The EIR will be prepared to evaluate potentially significant impacts related to the following issues:

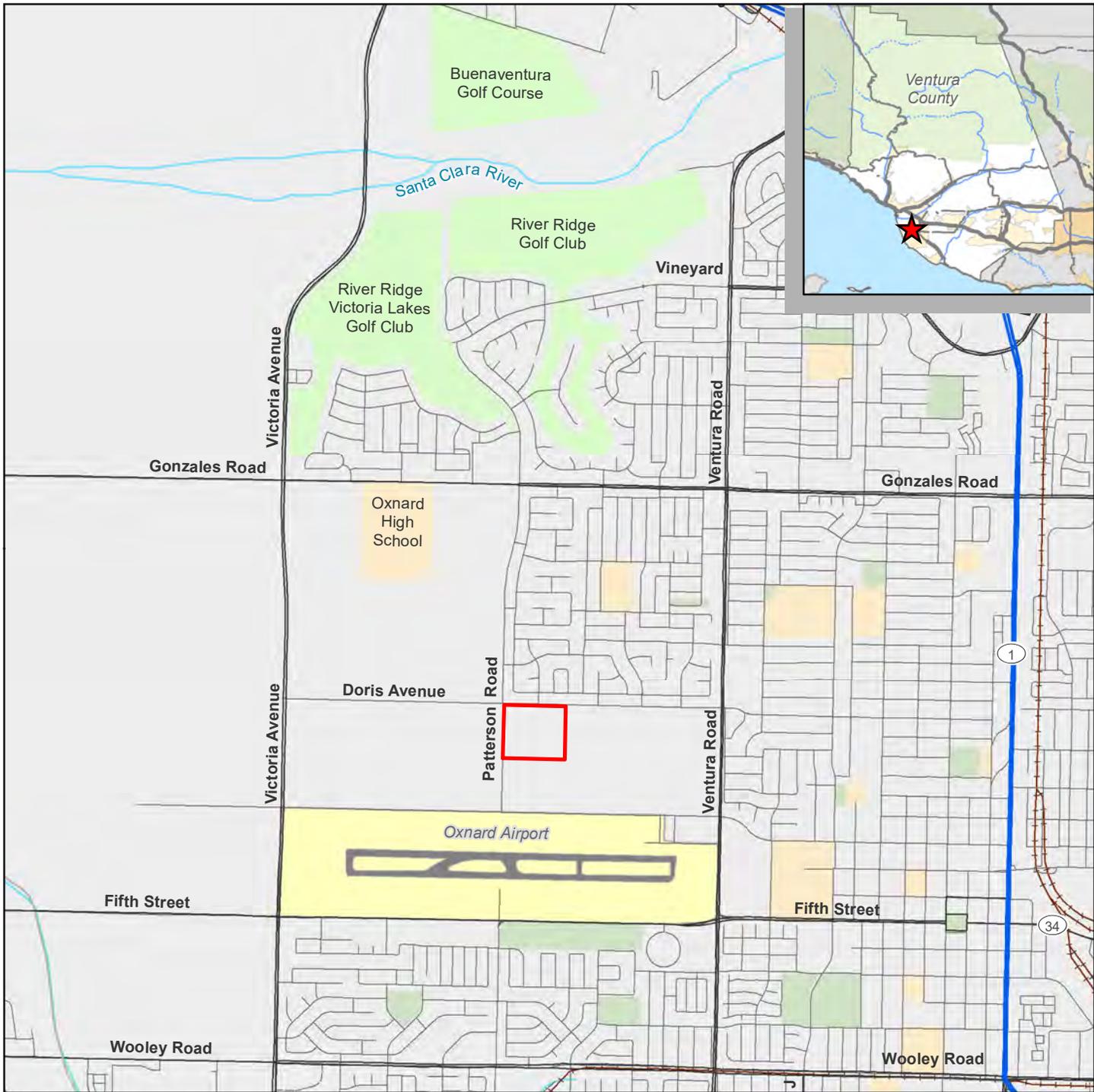
- Aesthetics
- Agriculture
- Air Quality
- Biological Resources
- Cultural Resources
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Tribal Cultural Resources
- Hydrology/Water Quality
- Land Use Planning
- Noise
- Population
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems

Based on the analysis contained within the IS, impacts related to Forestry, Mineral Resources, and Housing are anticipated to be less than significant. Therefore, these topics will not be studied in detail in the EIR.

Scoping Meeting: OSD will conduct a public scoping meeting for the proposed project. The purpose of the scoping meeting is to solicit and receive public comment and input regarding the appropriate scope and content in the preparation of the EIR. Participation in the public meeting by agencies, organizations, and persons is encouraged. The Scoping Meeting for the Environmental Impact Report for the Doris Patterson Educational Facilities Project is scheduled for **May, 22 2017, at 3:00 p.m.** at the Oxnard School District Board Room, 1051 South “A” Street, Oxnard, CA 93030.

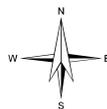
In addition to the public scoping meeting, comments can also be submitted in writing, attention: Ms. Lisa Cline, at the address provided above.

Document Availability: The NOP and IS are available for public review at the District Office at 1051 South “A” Street Oxnard, CA 93030 during normal business hours. They are also posted online on the District’s website at: http://www.oxnardsd.org/pages/Oxnard_School_District/Departments/Facilities



Legend

 Project Boundary



Background Map sources: ESRI, Ventura County GIS, Tetra Tech

Oxnard School District

Project Location and Vicinity Map
 Doris Patterson
 Educational Facilities Project



5383 Hollister Avenue
 Suite 130
 Santa Barbara, CA 93111

TC NO.	DATE	DRAWN BY	MAP NO.	FIGURE
34007.05	4/27/2017	REYNOLDS	9885	1-1

Job No. 34007-05

**Initial Study
Doris Avenue/Patterson Road
Educational Facilities Project
Ventura County, California**

Prepared for:

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South A Street
Oxnard, California 93030

Prepared by:

Tetra Tech, Inc.
5383 Hollister Avenue, Suite 130
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May 2017

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1.0 PROJECT INFORMATION

Project title:	Doris Patterson Educational Facilities Project
Lead agency name and address:	Oxnard School District 1051 S. A Street, Oxnard, CA 93030
Contact person and phone number:	Ms. Lisa Cline (805) 385-1501
Project location:	Southeast corner of Doris Avenue and North Patterson Road
Project sponsor's name and address:	Ms. Lisa Cline Oxnard School District 1051 S. A Street, Oxnard, CA 93030
General Plan Designation:	Ventura County: Agricultural- Urban Reserve City of Oxnard: Public/Semi-public, Open Space and Park,
Zoning Designation:	Ventura County: Agricultural Exclusive (AE-40) City of Oxnard: No zoning for unincorporated lands
Surrounding land uses:	North: Residential South: Agricultural East: Agricultural West: Agricultural

1.1 PROJECT LOCATION

The project site is located in unincorporated Ventura County, California and is within the Ventura County Save Open-Space and Agricultural Resources (SOAR) boundary. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). A Project Location and Vicinity Map is provided as Figure 1-1, The Site comprises a portion of Lot 158, in the City of Oxnard, County of Ventura, State of California as shown on the Map of Patterson Ranch, recorded in Book 8, Page 1 of Maps in the office of the Ventura County Recorder (Portion of APN: 183-0-070-090). The project site consists of 1,088,824.84 square feet (approximately 25 acres).

The project area is relatively flat and currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 107 based aircraft and approximately 54,500 operations a year. The project site is located within Safety Zone 6, identified as the Traffic Pattern Zone (Caltrans 2014).

1.2 PROJECT DESCRIPTION

The Oxnard School District (District or OSD) proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The project site is located within unincorporated Ventura County and within the City of Oxnard SOI area. The project will include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33.

Pursuant to Government Code Section 66428(a)(2), and in compliance with City of Oxnard Municipal Code Section 15-11, under a statutory exemption in the Subdivision Map Act, a tentative map is not required for property transferred to or from a government agency proceeding under Government Code section 66428(a)(2).

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with the Ventura Local Agency Formation Commission (LAFCo). Upon approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students- onsite. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings. An additional drop-off area for the play field area is provided along Patterson Road. A conceptual site plan is included as Figure 2. The project site will have a drought tolerant landscape that meets the 2009 Model Water Efficiency Landscape Ordinance (MWELo) regulations adopted by the Department of Water Resources (DWR).

A two-story 23,665 sq. ft. District Office is proposed on the northwest corner of the site with 62 parking stalls provided to the south and east of the building. Access to this parking area would be provided from Doris Avenue. An elementary school drop-off and pick-up area would separate the district office space from the elementary school buildings. Access to the elementary school drop-off and pick-up area would be from Patterson Road with traffic following in a single direction exiting on Doris Avenue. The elementary school buildings are clustered together to the east of the District office area with primary access provided from Patterson Road. These buildings are anticipated to include:

- Multi-Purpose & Food Services (8,975 sq. ft.)
- 2-Story/ 23 Classroom Building (22,560 sq. ft.)
- Administration Building (3,005 sq. ft.)
- Media Center & Student Support Services (4,210 sq. ft.)
- Kindergarten (6,400 sq. ft.)

A parking lot with 42 spaces is provided adjacent to the elementary school buildings to the north with access provided from Doris Avenue and an additional 20 parking spaces are provided within the drop-off and pick-up area to the west.

The middle school buildings are located near the northeast corner of the site and are anticipated to include:

- Administration Building (3,005 sq. ft.)
- Media Center (2,000 sq. ft.)
- Visual Arts & Music (3,200 sq. ft.)
- Student Support/Conference Center (3,800 sq. ft.)
- Food Services (3,900 sq. ft.)
- Two-Story/ 41 Classroom Building (45,312 sq. ft.)
- Science Building (2,600 sq. ft.)
- Restrooms (3,000 sq. ft.)
- Gymnasium (13,150 sq. ft.)

Approximately 96 parking stalls would be provided adjacent to the middle school buildings to the east. The bus drop-off and pick-up area for the middle school would be from Doris Avenue. An additional drop-off and pick-up area and parking lot would be provided to the east of the middle school buildings with access provided from a new road. The proposed new access road is expected to terminate at the southernmost access to the parking lot for the school.

The proposed project includes utility connections including water, sewer, gas, electric, data/telecommunications, and storm water collection. Water, wastewater, and recycled water need to be extended to the site. Power is located on the east side of Patterson Road. The nearby residential neighborhood to the north of the site has phone and cable/communication facilities that would need to be extended to the site.

Phased construction is anticipated to begin in 2019 and each school would take approximately 15 to 16 months to construct. Operation of the new K-5 elementary school is anticipated for the 2020-2021 school year followed by the 6-8 middle school for the 2022-2023 school year.

1.3 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

Other public agencies whose approval is required for permits, financing approval, or participation agreement, for example, is as follows:

- California Department of Education
- California Department of the State Architect
- California Department of Transportation, Aeronautics Division
- California Department of Toxic Substances Control
- California Geological Survey
- City of Oxnard

TETRA TECH, INC.

- County of Ventura
- Ventura County Local Agency Formation Commission
- Ventura County Airport Commission
- Calleguas Municipal Water District
- Metropolitan Water District of Southern California

2.0 ENVIRONMENTAL CHECKLIST

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| | | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

2.3 EVALUATION OF ENVIRONMENTAL IMPACTS

- (1) A brief explanation is required for all answers except “no impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “no impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “no impact” answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially significant impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “potentially significant impact” entries when the determination is made, an EIR is required.
- (4) “Negative declaration: less than significant with mitigation incorporated” applies when the incorporation of mitigation measures has reduced an effect from a “potentially significant impact” to a “less than significant impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- (5) Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063[c][3][D]). In this case, a brief discussion should identify the following:
 - a. Earlier analysis used. Identify and state where earlier analyses are available for review.
 - b. Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation measures. For effects that are “less than significant with mitigation incorporated,” describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

For purposes of this Initial Study, the City’s General Plan and Zoning Code Update Final EIR (May 2011) is hereby incorporated by reference.

- (6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
- (7) Supporting information sources. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

- (8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- (9) The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question, and
 - b. The mitigation measure identified, if any, to reduce the impact to a less than significant level.
- (10) The proposed Project includes compliance with applicable local, regional, state, and federal laws, regulations, and rules.

2.4 ENVIRONMENTAL IMPACT ANALYSIS

2.4.1 AESTHETICS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect on a scenic vista?			X	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				X
c.	Substantially degrade the existing visual character or quality of the site and its surroundings?	X			
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	X			

Discussion:

a. Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. Ventura County’s natural visual resources are largely composed of the varied topography, exposed geological formations, heterogeneous vegetation, beaches and waterways (Ventura 2015). According to the Ventura County General Plan, the conservation of scenic resources is most critical where the resources will be frequently and readily viewed, as from a highway, or where the resource is particularly unique. The project site is not located within or adjacent to a designated scenic resource area based on the Ventura County General Plan Resource Protection Map.

In the City of Oxnard, key view corridors include local waterways, agricultural open space, beaches, mountains, and a variety of urban landscapes (Oxnard 2011). The Santa Clara River (waterway) is not visible from the project site nor is the site located within a coastal area that could adversely impact coastal or beach views. The Oxnard-Ventura Agricultural Greenbelt is located to the west of the project site across Patterson Road. Views of these agricultural areas would primarily be from travelers on local roadways in the vicinity of the project site including Patterson Road and Doris Avenue. These are short duration viewers. Development of the proposed project would occur on the southeast corner of Doris Avenue and Patterson Road. Therefore, travelers’ views of the Greenbelt located to the west would not be substantially impacted on Patterson Road. On Doris Avenue, development of the project may obstruct westbound travelers’ views across the site to the Oxnard-Ventura Agricultural Greenbelt for a short duration in comparison to existing conditions. While this would be a visual change, it would not be a significant impact since the proposed project is located in area planned for future development in the City

of Oxnard General Plan and westbound travelers would be coming from similar developed areas. Eastbound travelers on Doris Avenue would be leaving the Greenbelt viewing area and traveling toward more developed urban areas in the City of Oxnard. Other viewers in the area include residents in the homes to the north of the project site. However, residents' views along Doris Avenue and Patterson road are generally obstructed by the existing wall and street trees. Therefore, the proposed project would have a less than significant impacts on scenic vistas and this issue will not be further analyzed in the EIR.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The project site is relatively flat and currently used for agriculture. The project site is not located adjacent to a designated State scenic highway or eligible State scenic highway, as identified on the California Scenic Highway Mapping System (Caltrans 2017). Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway and this issue will not be discussed further in the EIR.

c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Potentially Significant Impact. The project site is relatively flat and currently used for agriculture. It is surrounded by adjacent agricultural uses to the south, east and west. Located to the north of the project site is a residential neighborhood. Development of the proposed project will result in a visual change from construction and operation of the new educational facilities in comparison to existing conditions. Therefore, potential impacts to the visual character or quality of the site and its surroundings will be analyzed further in the EIR.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Potentially Significant Impact. The proposed project will include exterior lighting around the buildings and for walkways and parking as needed for adequate safety and security at night. It is anticipated that the school would be used in the evening for community meetings and periodic school activities. As such, the proposed project could represent a new source of light or glare which could potentially impact nighttime views in the area. Therefore, the EIR will analyze potential light and glare impacts.

2.4.2 AGRICULTURE AND FOREST RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	X			
b.	Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	X			
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)) or timberland (as defined in PRC Section 4526)?				X
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				X
e.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	X			

Discussion:

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Potentially Significant Impact. The project site is currently used for agriculture and is identified as being farmland of statewide importance on the Ventura County Important Farmland Map prepared by the California Department of Conservation (CDOC 2014). Therefore, this issue will be further analyzed in the EIR.

- b. **Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?**

Potentially Significant Impact. The project site is zoned in Ventura County as Agricultural Exclusive (AE-40) and is located within the Ventura County SOAR boundary. The California Land Conservation

Act (LCA) also known as the Williamson Act, provides property owners of qualifying land with tax incentives to protect agricultural land and open space from being rezoned and subdivided for higher density development (Ventura 2017). The project site is not under contract according to the Ventura County 2014 Land Conservation Act Contracts Map (Ventura 2014). Therefore, the proposed project would not conflict with an LCA/ Williamson Act contract. However, the project site is zoned for agricultural use. Therefore, this issue will be analyzed in the EIR.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)) or timberland (as defined in PRC Section 4526)?

No Impact. Ventura County does not contain land which produces timber commercially for eventual use as lumber or pulp. However, there are six Christmas tree farms zoned Timberland Preserve (T-P) pursuant to the provisions of the Timberland Preserve Zone of the County Zoning Ordinance. Five of these six properties are located in the Ojai Valley area and one in the Piru area. (Ventura 2011). The project site is zoned AE-40 and there is no forest timberland located on the project site. Therefore, the proposed project would not conflict with zoning for, or cause rezoning of, forest land or timberland and this issue will not be further analyzed in the EIR.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. There is no forest land located on the project site. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to a non-forest use and this issue will not be further analyzed in the EIR.

e. Would the project involve other changes in the existing environment that, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Potentially Significant Impact. There is no forest land located on or adjacent to the project site. Therefore, the proposed project would not individually or cumulatively result in the loss of Farmland to non-forest use and this issue will not be further analyzed in the EIR. The project site is currently used for agriculture and implementation of the proposed project would convert the site to a non-agricultural use. Therefore, this issue will be evaluated in the EIR.

2.4.3 AIR QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	X			
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	X			
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	X			
d.	Expose sensitive receptors to substantial pollutant concentrations?	X			
e.	Create objectionable odors affecting a substantial number of people?	X			

Discussion:

- a. Would the project conflict with or obstruct implementation of the applicable air quality plans?**

Potentially Significant Impact. The project site is located within Ventura County and within the sphere of influence of the City of Oxnard. To pursue improvement of air quality in Ventura County, the Ventura County Air Pollution Control District (VCAPCD) has prepared the 2007 Air Quality Management Plan (AQMP), which presents a comprehensive list of pollution control strategies aimed at attaining Ventura County's federal 8-hour ozone standard as required by the Clean Air Act Amendments of 1990 and the VCAPCD's Triennial Assessment and Plan Update required by the California Clean Air Act of 1988. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments and reflected in local general plans. An air quality study will be conducted for the proposed project and this issue will be analyzed in the EIR.

- b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

Potentially Significant Impact. The proposed project is located within Ventura County, which is subject to the Ventura County Air Pollution Control District (VCAPCD) regulations. Pollutant concentrations within the Ventura County are assessed relative to both the federal and state ambient air quality standards. Ventura County is in attainment for all federal standards except the 8-hour O₃ standard (U.S. EPA 2017) and all state standards except O₃ and PM₁₀ standards (CARB 2016). The release of various criteria pollutants from both short-term construction and long-term operation related activities for the proposed project are expected but which by itself, are not be expected to generate significant air emissions. Nonetheless, an air quality study will be conducted for the proposed project and this issue will be analyzed in the EIR.

- c. **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

Potentially Significant Impact. The proposed project would result in significant cumulative impacts if it exceeds daily thresholds of significance established by VCAPCD or if it incurs an increase of emissions beyond what is planned in the General Plan. An air quality study will be prepared for the proposed project and this issues will be analyzed further in the EIR.

- d. **Would the project expose sensitive receptors to substantial pollutant concentrations?**

Potentially Significant Impact. The proposed project includes two schools to help meet the educational needs of District students. The proposed project is anticipated to have a less than significant impact on sensitive receptors. Nonetheless, an air quality study will be prepared for the proposed project and this issues will be analyzed further in the EIR.

- e. **Would the project create objectionable odors affecting a substantial number of people?**

Potentially Significant Impact. Construction and operation of the proposed project is not anticipated to create objectionable odors. The project would be adjacent to agricultural fields which may subject the project to objectionable odors during application of fertilizers, herbicides or pesticides. Therefore, this issue will be analyzed further in the EIR.

2.4.4 BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	X			
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?				X

Discussion:

- a. **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in**

local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Potentially Significant Impact. A query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) was conducted to determine known locations of any special-status species (sensitive, endangered, rare, or candidate species) within and adjacent to the project area. Table 2-1 and Table 2-2 list the special-status wildlife and plant species that have been observed within the Oxnard quadrangle and the five adjacent quadrangles around the project site, based on a CNDDDB database query. None of the species listed in Tables 2-1 and 2-2 have been observed on or within one mile from the project site. Species from the CNDDDB search for which there is no potential habitat at the site or immediately adjacent to the site (for example, species that only inhabit dunes or marshes) have not been included within Tables 2-1 and 2-2. Additional assessment on the potential for the project site to support particular special-status and sensitive species will be conducted.

Table 2-1. Special-Status Wildlife Species with Potential to Occur within or Near the Project Site

Common Name	Scientific Name	Federal Status / State Status	Other Status
Birds			
White-tailed kite	<i>Elanus leucurus</i>	-	FP, BLM-S
Ferruginous hawk	<i>Buteo regalis</i>	-	WL, BCC
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT / SE	BCC, BLM-S, USFS-S
Burrowing owl	<i>Athene cunicularia</i>	-	SSC, BCC, BLM-S
Southwestern willow flycatcher	<i>Empidonax traillii eximius</i>	FE / SE	-
California horned lark	<i>Eremophila alpestris actia</i>	-	WL
Bank swallow	<i>Riparia riparia</i>	- / ST	BLM-S
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT / -	SSC
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE / SE	-
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	- / SE	-
Tricolored blackbird	<i>Agelaius tricolor</i>	- / SCE	SSC, BCC, BLM-S
Mammals			
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	- / -	SSC
Pallid bat	<i>Antrozous pallidus</i>	- / -	SSC, BLM-S, USFS-S
Western mastiff bat	<i>Eumops perotis californicus</i>	- / -	SSC, BLM-S
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	- / -	SSC
American badger	<i>Taxidea taxus</i>	- / -	SSC
Reptiles			
Western pond turtle	<i>Emys marmorata</i>	- / -	SSC, BLM-S, USFS-S
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	- / -	SSC, USFS-S
Coast horned lizard	<i>Phrynosoma blainvillii</i>	- / -	SSC, BLM-S
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	- / -	SSC
South coast gartersnake	<i>Thamnophis sirtalis ssp.infernalis</i>	- / -	SSC
Two-striped gartersnake	<i>Thamnophis hammondi</i>	- / -	SSC, BLM-S, USFS-S
Invertebrates			
Monarch - California overwintering population	<i>Danaus plexippus</i>	- / -	USFS-S

Notes: Results based on CNDDDB query for six regional quadrangles.
 FE = Federally Listed Endangered FT = Federally Listed Threatened
 SE = State Listed Endangered ST = State Listed Threatened SCE = State Candidate Endangered
 BCC = USFWS Birds of Conservation Concern

SSC = CDFW Species of Special Concern
 FP = CDFW Fully Protected
 WL = CDFW Watch List
 BLM-S = Bureau of Land Management Sensitive
 USFS-S = US Forest Service Sensitive

Table 2-2. Special-Status Plant Species with Potential to Occur within or Near the Project Site

Common Name	Scientific Name	Federal Status / State Status	Other Status
Woven-spored lichen	<i>Texosporium sancti-jacobi</i>	- / -	3
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	- / -	BLM-S, 1B.1
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	- / -	2B.2
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	- / -	BLM-S, 1B.1
Mexican malacothrix	<i>Malacothrix similis</i>	- / -	2A
Chaparral ragwort	<i>Senecio aphanactis</i>	- / -	2B.2
Aphanisma	<i>Aphanisma blitoides</i>	- / -	1B.2
Coulter's saltbush	<i>Atriplex coulteri</i>	- / -	1B.2
South coast saltscale	<i>Atriplex pacifica</i>	- / -	1B.2
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	- / -	1B.2
Estuary seablite	<i>Suaeda esteroa</i>	- / -	1B.2
Blochman's dudleya	<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	- / -	1B.1
Verity's dudleya	<i>Dudleya verityi</i>	FT / -	1B.1
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	FE / -	1B.1
Ventura Marsh milk-vetch	<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	FE / SE	1B.1
White-veined monardella	<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	- / -	1B.3
Gerry's curly-leaved monardella	<i>Monardella sinuata</i> ssp. <i>gerryi</i>	- / -	1B.1
Conejo buckwheat	<i>Eriogonum crocatum</i>	- / SR	1B.2
Ojai navarretia	<i>Navarretia ojaiensis</i>	- / -	USFS-S, 1B.1
Salt marsh bird's-beak	<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE / SE	1B.2
Plummer's mariposa-lily	<i>Calochortus plummerae</i>	- / -	4.2
Late-flowered mariposa-lily	<i>Calochortus fimbriatus</i>	- / -	BLM-S, USFS-S, 1B.3

Notes: Results based on CNDDDB query for six regional quadrangles.
 FE = Federally Listed Endangered FT = Federally Listed Threatened
 SE = State Listed Endangered SR = State Listed Rare
 BLM-S = Bureau of Land Management Sensitive
 USFS-S = US Forest Service Sensitive

CNPS CRPR (California Native Plant Society, California Rare Plant Rank)
 1B = Plants Rare, Threatened, or Endangered in California and elsewhere
 2A = Plants presumed extirpated in California, but common elsewhere
 2B = Plants Rare, Threatened, or Endangered in California, but common elsewhere
 3 = Plants about which more information is needed (Review List)
 4 = Plants of limited distribution (Watch List)
 0.1 = Seriously threatened in California (over 80% of occurrences threatened)
 0.2 = Moderately threatened in California (20-80% occurrences threatened)
 0.3 = Not very threatened in California (less than 20% of occurrences threatened)

The project site has historically and is currently used for agricultural row crop production. The surrounding areas are predominantly agricultural and urban residential with a high level of human

activity. Due to the disturbed and agricultural nature of the site (i.e., lack of natural vegetation and suitable habitat), the potential to support the majority of the special-status and sensitive species listed in Table 2-1 and Table 2-2 is low. Species expected to occur at the site would be common weeds and animal species (raccoons [*Procyon lotor*], sparrows [*Passer* spp.], mice [*Mus* spp.], etc.) that are often found in croplands and disturbed areas. Nonetheless, a biological site visit will be conducted that will assess the presence of special-status and sensitive species and further investigate the potential for the project site to support such species. If needed, mitigation measures will be identified. Therefore, this issue will be further analyzed in the EIR.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. The CNDDDB identified nine sensitive habitat types within a six quadrangle search around the project site:

- Southern California coastal lagoon
- Southern California steelhead stream
- Valley needlegrass grassland
- Southern coastal salt marsh
- Coastal and valley freshwater marsh
- Southern coast live oak riparian forest
- Southern sycamore alder riparian woodland
- Southern riparian scrub
- California walnut woodland

The nearest identified sensitive habitats to the project site are patches of southern riparian scrub approximately 1.8 miles to the north, and coastal and valley freshwater marsh approximately 2.7 miles to the northwest. The project site is currently used only for agricultural row crop production. No sensitive habitats are known to occur within or directly bordering the project, nor would the proposed project result in habitat impacts outside the site boundaries. Therefore, the proposed project would have no impact on riparian habitat or other sensitive natural communities, and this issue will not be addressed in the EIR.

A biological site visit is scheduled to occur as part of the EIR biological analysis (as noted above). In the unlikely event that potential riparian or sensitive habitats are identified onsite during the visit, they would be assessed in the EIR.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The CNDDDB database indicated that southern California coastal lagoon, southern California steelhead stream, southern coastal salt marsh, and coastal and valley freshwater marsh are present within a six quadrangle search around the project site. None of these wetland habitats are present on or within one mile of the project site. The U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) identified riverine channels running along portions of Teal Club Road and Doris Avenue, beginning approximately 0.25 mile northwest and 0.25 mile south and southwest of the project site. Additionally, un-vegetated and frequently maintained man-made irrigation drainage ditches occur south of the project site. These ditches were created for agricultural purposes and have no formal jurisdictional delineation.

No other types of wetlands are known to occur within one mile of the site. Furthermore, no wetlands are known to occur within or directly bordering the project site and no impact would occur to these resources. Therefore, this issue will not be addressed in the EIR. However, in the unlikely event, that potential wetlands are identified onsite during the biological site visit that is scheduled to occur as part of the EIR process then they will be assessed in the EIR.

- d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Less Than Significant Impact. The project site is currently and historically agricultural. The surrounding area consists of agricultural and urban residential uses with high levels of human activity. The project site is not located within or directly adjacent to any known or mapped wildlife corridors or nursery sites. The drainages near the site may serve as limited habitat for some common wildlife species, but are not likely to provide habitat for native or migratory species. It is also feasible that off-site trees in the vicinity of the project site may provide a resting site for monarch butterflies (*Danaus plexippus*) during migration to overwintering areas. However, monarchs have not been observed at the site and are unlikely to reside in these highly disturbed areas. Based on the agricultural nature of the site and fragmentation from high quality habitat due to surrounding agricultural and urbanized land uses, the site is unlikely to be used as a wildlife corridor or nursery site. Therefore, there would be less than significant impact to these resources, and this issue will not be addressed in the EIR.

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

No Impact. The project site is highly disturbed and is currently used for agricultural production. Additionally, there are no trees present within the site. The proposed project would not conflict with any local policies or ordinances protecting biological resources. Therefore, this issue will not be addressed in the EIR.

- f. Would the project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?**

No Impact. The project site is not included in any state, regional, or local habitat conservation plans. Therefore, no impacts would occur and this issue will not be addressed in the EIR.

2.4.5 CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	X			
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	X			
c.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			
d.	Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion

a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Potentially Significant Impact. The project site lacks any buildings or structures and is currently used for agriculture row crops. Due to agricultural use, the project site soils have been disced and plowed and are considered disturbed within the plow zone (approximately 0-30 centimeters below surface). Section 15064.5(a) (3) of the CEQA Guidelines defines a “historical resource” as a resource that meets one or more of the following criteria:

- Listed in, or determined eligible for listing in, the California Register of Historical Resources (CRHR); or
- A resource listed in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code (PRC); or
- Identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC; or
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California that

may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC, § 5024.1, Title 14 California Code of Regulation [CCR], Section 4852) including the following:

- An association with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- An association with the lives of persons important to local, California, or national history.
- An embodiment of the distinctive characteristics of a type, period, region, or method of construction, or a representation of the work of a master, or possesses high artistic values.
- A resource that has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The South Central Coastal Information Center (SCCIC) is one of twelve regional Information Centers that comprise the California Historical Resources Information System (CHRIS). CHRIS works under the direction of the California Office of Historic Preservation (OHP) and the State Historic Resources Commission (Fullerton 2017). A literature and records search will be conducted of the cultural resource site and project file collection at the SCCIC for the project site. As part of the record search, the SCCIC database of survey reports and overviews, documented cultural resources, cultural landscapes, and ethnic resources will be consulted. Additionally, the search will include a review of the following publications and lists: OHP Historic Properties Directory/National Register of Historic Properties, OHP Archaeological Determinations of Eligibility, California Inventory of Historical Resources/California Register of Historic Resources, *California Points of Historical Interest*, *California Historical Landmarks*, ethnographic information, historical literature, historical maps, and local historic resource inventories. The record search will focus specifically on the project site, area of potential affect (APE) and a 1-mile buffer around the APE (the project study area). In 2012, the Native American Heritage Commission (NAHC) previously conducted a Sacred Lands File (SLF) search for a larger project that included the proposed project site and Native American cultural resources were not identified (NAHC 2012). Nonetheless, a new SLF search of the project site will be conducted since it has been over 5 years since the previous NAHC SLF search.

Assembly Bill (AB) 52 requires a lead agency to evaluate a project's potential to impact "tribal cultural resources." In addition, AB 52 requires the lead agency to consult with any California Native American tribe that has previously requested that the lead agency provide the tribe with notice of such projects and consultation, and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources (as applicable), and alternatives and mitigation measures recommended by the tribe. In order to begin this process, the District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation.

Therefore, the EIR will evaluate the potential for the proposed project to result in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

b. b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Potentially Significant Incorporated. As noted above, Native American consultation and a records search will be conducted and the potential for any adverse change(s) in the significance of archaeological resource(s) evaluated in the EIR.

c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potentially Significant Impact. In Ventura County, paleontological remains, typically identified in Pleistocene-age alluvial deposits, include examples from throughout most of geological history, including the Paleozoic (600-225 million years ago), Mesozoic (225-70 million years ago) and Cenozoic (70 million years ago-present) eras. Based on the geological map of Ventura County, Oxnard quadrangle, the project site is underlain by Holocene age (10,000 years before present (BP) to recent) alluvial fan deposits composed of soils that are predominately of clay with interbeds of sand and occasional gravel (Koury 2014, Calhan 2003). Holocene deposits may overlies older alluvium of Pleistocene age (2.6 million years ago to 10,000 years BP). Holocene age deposits are considered to have a low sensitivity for yielding paleontological resources. In 2010, a paleontological record search of the museum collection records maintained by the Natural History Museum of Los Angeles County (LACM) was conducted for the Oxnard Airport Land Easement Acquisition Project, approximately 0.40 miles south of the project site (SWCA 2009). The record search included a one mile radius around the airport and indicated that no previously identified paleontological localities occurred within the search area, nor had any resources been reported within the same Holocene age geological unit as the current project site (SWCA 2009). Based on the Holocene-age deposits, surficial ground disturbance is unlikely to encounter or cause a substantial adverse change in significance to a paleontological resource. However, if project ground disturbing construction depths exceed the Holocene age deposits or encounters shallow Pleistocene deposits, paleontological resources may be exposed. Paleontological resources in Ventura County include many widely dispersed outcrops of fossil bearing formations (Ventura 2011). Therefore, the EIR will address potential impacts to paleontological resources.

d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. The project site is currently used for agriculture. Existing regulations require that if human remains and/or cultural items defined by the Health and Safety Code, Section 7050.5, are inadvertently discovered, all work in the vicinity of the find would cease and the Ventura County Coroner would be contacted immediately. If the remains are found to be Native American as defined by Health and Safety Code, Section 7050.5, the coroner will contact the NAHC by telephone within 24 hours. The NAHC shall immediately notify the person it believes to be the Most Likely Descendant (MLD) as stipulated by California PRC, Section 5097.98. The MLD(s), with the permission of the landowner and/or authorized representative, shall inspect the site of the discovered remains and recommend treatment regarding the remains and any associated grave goods. The MLD shall complete their inspection and make their recommendations within 48 hours of notification by the NAHC. Any discovery of human remains would be treated in accordance with Section 5097.98 of the Public Resources Code (PRC) and Section 7050.5 of the Health and Safety Code. SCCIC record search results and Tribal consultation. Therefore, with compliance with existing regulations, project impact would be less than significant.

2.4.6 GEOLOGY AND SOILS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i.) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
	ii.) Strong seismic ground shaking?	X			
	iii.) Seismic-related ground failure, including liquefaction?	X			
	iv.) Landslides?			X	
b.	Result in substantial soil erosion or the loss of topsoil?	X			
c.	Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d.	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	X			
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?				X

Discussion:

- a. **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i.) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant Impact. The project site is not located within a designated Alquist-Priolo (A-P) Earthquake Hazard Zone. There are no known active faults beneath or trending toward the site, the probability of surface rupture due to faulting at the site is considered low. The nearest A-P Earthquake Hazard Zones are on three faults located between 4 and 6 miles of the site, with traces that do not project into the site vicinity. Therefore, project impact would be less than significant and this issue will not be discussed further in the EIR.

- ii.) **Strong seismic ground shaking?**

Potentially Significant Impact. The Ventura County General Plan Hazard Appendix (County of Ventura 2013) indicates that even though the historic record indicates that no strong earthquakes or surface displacement have occurred along the faults in southern Ventura County in the site area, the likelihood of the occurrence of one or more of such events within the next 50 to 100 years is not insignificant. The site is likely to be subjected to strong ground shaking associated with earthquakes generated on nearby and distant faults at some time in the future.

The project site is located in an area with a potential for strong ground motion during earthquakes. The site is located in an area underlain by unconsolidated Holocene deposits, which are considered to be potentially hazardous with respect to ground motion potential. Koury Geotechnical Services, Inc. (Koury) evaluated the seismic ground shaking potential for a 20-acre portion of the Site in 2014. Because the mapped 1-second spectral response period (S_1) for the portion of the project site evaluated in 2014 is 0.912g, which is greater than 0.75g, in accordance with Section 1616A.1.3 the 2013 CBC a site specific ground motion hazard analysis should be performed for the project site (Koury 2014). Therefore, potential impact from strong seismic ground shaking will be analyzed further in the EIR.

- iii.) **Seismic-related ground failure, including liquefaction?**

Potentially Significant Impact. Generally, there is a potential for liquefaction when the following three conditions are met: (1) a site is located on Holocene age, unconsolidated, coarse-grained sediments; (2) the site is in area of potentially strong ground motion; and (3) groundwater is less than 50 feet below ground surface (bgs). The *Seismic Hazards Zone Report for the Oxnard 7.5-Minute Quadrangle, Ventura County California* (CGS 2002), *State of California Seismic Hazard Zones Oxnard Quadrangle, Revised Official Map* (CGS 2002), and Figure 2.4b of the *Ventura County General Plan, Hazards Appendix* (County of Ventura 2013) indicates that the Site is located in a recognized geological hazard zone for earthquake induced liquefaction. This findings in these data are based on the assumptions that the Site area is underlain by coarse grained Holocene age sediments, which are generally considered have a significant liquefaction potential, and because the depth to groundwater for the Site area is estimated to be less than 50 feet bgs. Groundwater was encountered in exploratory soil borings drilled at the Site by

Koury in 2014 at between 16 and 19 feet bgs, which is much shallower than the 50 feet bgs depth used as the maximum depth criterion for potentially liquefiable conditions.

Koury evaluated the liquefaction potential for a 20-acre portion of the Site in accordance with the 2013 CBC (CBSC 2013) and the methods in the *Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A* (CGS 2008). Koury concluded that considering the soil types and groundwater conditions at the Site, there is a potential for liquefaction to occur. If liquefaction were to occur at the site, the repercussions would likely be in the form of dynamic settlement; loss of soil bearing strength and lateral spreading are not anticipated (Koury 2014). The existing data is incomplete and additional site-specific geotechnical analysis must be performed at the locations of all proposed buildings. Therefore, potential impact from liquefaction will be analyzed further in the EIR.

iv.) Landslides

Less Than Significant Impact. A review of the CGS Seismic Hazards Map for the 7.5 Minute Series Oxnard Quadrangle (CGS 2002), Figure 2.7.1b of the *Ventura County General Plan, Hazards Appendix* (County of Ventura 2013), and Section 6.2.2 of the *City of Oxnard General Plan Draft Background Report* (City of Oxnard 2006) indicates that the Site is not in an area prone to landslides and slope instability. Therefore, project impact would be less than significant and this issue will not be analyzed further in the EIR.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Potentially Significant Impact. Soil erosion would potentially occur during construction activities, including site grading, structure assembly, and utility extension. This impact can be reduced to a less than significant level with erosion mitigation measures developed through preparation of a site-specific Stormwater Pollution Prevention Plan and adherence to applicable regulatory guidelines and standards. These measures would also reduce potential air quality impacts and sedimentation. Additional site-specific analysis must be performed for construction of the proposed structures. Therefore, potential impact from soil erosion or loss of topsoil will be analyzed further in the EIR.

c. Is the project located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact. Based on the results of the 2014 Koury liquefaction analysis for a subset area of the Project, the potential for loss of soil bearing strength and lateral spreading at the Site was determined to be low. Lateral spreading can occur when a soil mass either slides laterally on liquefied soil layers towards a free slope face, or when a soil mass moves downslope on gently sloping ground. There are no free slope faces or significant sloping ground present in the project area that would allow for lateral spreading to occur. Therefore, potential impact from this issue will not be analyzed further in the EIR.

d. Is the project located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Potentially Significant Impact. The *Soil Survey Geographic Database, Ventura Area, California* (USDA 2016) indicates that the naturally occurring soils at the Site (Camarillo loam [Cd]) are non-plastic to medium plastic poorly drained loam to up to 24 inches below ground that transitions to a stratified sandy loam to clay loam up to 50 inches below ground.

During a geotechnical investigation conducted at a 20-acre subset of the Project site in 2014, Koury reported that loam tested in one instance at the site exhibited an Expansion Index (EI) of 38 (EI ranges between 20 and 50 are considered low). However, Koury also noted that the field consolidation test was conducted on soil with a relatively high degree of in-situ saturation and suggested that saturation might result in an artificially low EI. Koury stated that the heterogeneous nature of the alluvial deposits in the area would also suggest that expansive soils could be located elsewhere on the site (Koury 2014).

Koury concluded that additional investigation of soil expansion potential should be performed to determine appropriate grading and foundation design criteria (Koury 2014). Therefore, potential impact from expansive soils will be analyzed further in the EIR.

- e. **Would the project have soils that are incapable of supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No Impact. The proposed project would not use septic tanks or alternative wastewater disposal systems and no project impact would result. Therefore, this issue will not be analyzed in the EIR.

2.4.7 GREENHOUSE GAS EMISSIONS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	X			
b.	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	X			

Discussion:

- a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Potentially Significant Impact. The proposed project would generate GHGs during construction and operation activities. Pursuant to state law (CEQA Guidelines 15064.7), VCAPCD is authorized to adopt thresholds of significance for GHG emissions. To date, VCAPCD has evaluated multiple options, but has not made a decision to adopt any of these options. VCAPCD is leaning towards the adoption of thresholds of significance for land use development consistent with those adopted by the South Coast Air Quality Management District (SCAQMD). On 5 December 2008, SCAQMD Governing Board adopted a proposal for an interim GHG threshold of significance for projects where the SCAQMD is lead agency. The threshold of significance is applicable for stationary sources and can be used for determining significant impacts for proposed projects (SCAQMD 2008). Under the interim thresholds of significance, projects can emit up to 10,000 MT per year of CO₂e before being deemed as having significant impacts. Therefore, GHGs resulting from the Proposed Project will be calculated using CalEEMod and this issue will be further analyzed in the EIR.

- b. Would the project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?**

Potentially Significant Impact. As noted above, GHGs resulting from the Proposed Project will be calculated using CalEEMod and included in the EIR. Based on these results, the proposed project will be evaluated in the EIR for potential conflict(s) with applicable plans, policies or regulations of an agency adopted for the purpose of reducing the emissions of GHGs.

2.4.8 HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	X			
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X			
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	X			
f.	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?				X
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h.	Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Discussion:

***Draft Initial Study for the Proposed
Doris Avenue/ Patterson Road Educational Facilities Project***

- a. **Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less Than Significant Impact. The proposed project would not handle or generate large quantities of hazardous materials. Potential hazardous materials used onsite include those needed during short term temporary construction activities such as architectural coatings and sealants. During long term operations, small quantities of potential hazardous materials stored at the school would include cleaners (e.g., disinfectants, bleach) and office supplies (e.g., toner). As is standard for schools, these materials would be kept in cabinets or supply rooms and therefore, would not be considered a hazard to students, staff, or the public. Therefore, the project impact would be less than significant.

- b. **Would the project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?**

Less Than Significant Impact. The proposed project would not create a significant hazard to the public or the environment involving the likely release of hazardous materials. As noted in response 2.4.8 a), the proposed project would not handle or generate large quantities of hazardous materials. Common hazardous materials needed for routine maintenance and operations would be stored in small quantities in cabinets and supply rooms except during use. Since hazardous materials on campus would be limited and stored away from students and the public, project impact would be less than significant.

- c. **Would the project emit hazardous emissions or handle hazardous materials or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?**

Potentially Significant Impact. The proposed project includes public school facilities that would not generate hazardous emissions or use materials in hazardous quantities. Therefore, project impact would be less than significant from operations.

However, radon is a naturally occurring, odorless, colorless gas produced by certain geologic materials. It is known to be a human carcinogen and can pose a cancer risk greater than one in one million in humans at activities equal to or greater than 4 picocuries per liter (pCi/L). The proposed project site is located in a Radon Zone Level 1 area, which has predicted average indoor radon levels greater than 4 pCi/L. Zone 1 areas have a predicted average indoor screening level greater than 4 pCi/L. The EDR database search reported that of 38 sites listed in the California Radon database that have been tested for the site Zip Code 93030, one had radon at levels greater than 4 pCi/L. The Federal Area Radon Information database reported 9 sites tested for radon in Zip Code 93030. The average concentration of tested sites was 0.478 pCi/L in first floor living areas, with 100 percent of the tests reported as less than 4 pCi/L (EDR 2015). Since the U.S. EPA has listed Ventura County as Radon Zone 1, there is a potential that enclosed areas of the school may contain radon at concentrations that exceed the one-in-one million cancer risk to humans. Therefore, this issue will be evaluated further in the EIR.

- d. **Is the project located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Potentially Significant Impact. The project site is listed as a potential school site in the EnviroStor database maintained by the Department of Toxic Substances Control (DTSC 2017). The findings of a Phase I Environmental Site Assessment (ESA) showed the following: the project site was used for

agriculture from 1940 to present; a closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, which received regulatory closure in 1998; and a plugged and inactive oil well is located approximately 475 feet south of the project site and the Site is located in the Montalvo West oil field (Ninyo & Moore 2015a). In addition, Ninyo & Moore recommended that a pipeline risk assessment be performed to analyze the risk from the presence of a natural gas pipeline located approximately 990-feet south of the project site and from a 12-inch water pipeline beneath Doris Avenue as required by California Code of Regulations (CCR) Title 5, Section 14010(h) (Ninyo & Moore 2015b). A pipeline risk assessment was completed for a 20-acre portion of the project site.

Based upon findings of the Phase I ESA, a draft Preliminary Environmental Assessment (PEA) has been prepared for the project site by ATC Group Services, Inc. (ATC) to evaluate the site for potential human health risk from historical agricultural pesticide use, as well as potential health and safety risks from methane and hydrogen sulfide vapor leakage from the Montalvo West oil field and a nearby abandoned oil well (ATC 2017). The presence of the closed UST site was not further investigated in the PEA.

The PEA evaluated soil for organochlorine pesticides (OCPs), arsenic, and oil field related soil gases (methane and hydrogen sulfide). Methane was detected in a single soil gas sample at the northeast corner of the Site at 15 parts per million and was therefore not considered to pose a hazard at the project site. Only toxaphene and arsenic were detected in surface soil at concentrations above the U.S. EPA Region 9 Regional Screening Levels (RSLs). The concentrations of arsenic fall below the regional background concentration of 12 mg/kg for Southern California and were excluded from further evaluation. The results of OCP sampling were applied to a human health screening evaluation (HHSE) to determine the cumulative health risks from nine detected pesticides for four potential site receptors: future residents, future site workers, future site students, and future construction workers. The HHSE showed the proposed project is not expected to result in increased non-cancer health risks for any of the potential receptors from pesticides in soil. However there was a cancer risk (1.3×10^{-6}) for hypothetical future residential receptors above the point of departure of one-in-one million risk (1×10^{-6}) for increased cancer incidence. No other use scenario showed an increase in cancer risk from pesticide exposure above the point of departure (1×10^{-6}) for other potential receptors. The project site is not proposed for residential use, but for use as a public school. The HHSE did not indicate an increase in risk for cancer to receptors (students and site workers) under these proposed site uses.

Since the findings of the PEA showed there are no significant health and safety risks from OCPs and methane in soil gas from the Montalvo West oil field, the project impact would be less than significant.

A pipeline risk assessment has been completed for only a 20-acre portion of the project site to evaluate risk from a 10-inch natural gas distribution pipeline located approximately 990-feet south of the project site or from a 12-inch water pipeline beneath Doris Avenue. Therefore, the EIR will evaluate the potential for the proposed project to result in a safety hazard for pipeline failure risk for the entire project site.

- e. **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**

Potentially Significant Impact. The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. The county-owned Oxnard Airport is an active general aviation/small scheduled service airport with approximately 107 based aircraft and approximately 54,500 operations a year (Caltrans 2014). Therefore, the EIR will

evaluate the potential for the proposed project to result in a safety hazard for people residing or working in the project area.

- f. For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

No Impact. The proposed site is not located near a private airstrip. Therefore, there would be no impact on the safety of people residing or working within the project area.

- g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less Than Significant Impact. The proposed project includes educational facilities that would not impair implementation of or physically interfere with an adopted emergency response plan. The proposed project would primarily utilize the existing roadway network. Furthermore, the school is designed to ensure adequate emergency access. Therefore, project impact would be less than significant.

- h. Would the project expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

Less Than Significant Impact. All areas of Ventura County are subject to periodic wildfire episodes with the exception of flat farmlands in the Oxnard Plain and certain other areas. The project site is not identified as being within a severity zone (very high, high, or moderate) on the Ventura County Fire Hazard Severity Zones Local Responsibility Areas map prepared by the California Department of Forestry and Fire Protection (Cal Fire 2010). Furthermore, the placement of buildings, pavement, and landscaping is less conducive to the spreading of wildland fires and the educational facilities would be maintained in accordance with the City of Oxnard fire department standards. Therefore, the project impact would be less than significant and this issue will not be examined further in the EIR.

2.4.9 HYDROLOGY AND WATER QUALITY

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Violate any water quality standards or waste discharge requirements?	X			
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	X			
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?	X			
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?	X			
e.	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	X			
f.	Otherwise substantially degrade water quality?	X			
g.	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map or other flood hazard delineation map?				X
h.	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	X			

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i.	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	X			
j.	Contribute to inundation by seiche, tsunami, or mudflow?				X

Discussion:

a. Would the project violate any water quality standards or waste discharge requirements?

Potentially Significant Impact. The project would need to connect to a sanitary sewer main which conveys domestic wastewater to the OWTP. The OWTP, owned and operated by the City of Oxnard, is a secondary treatment facility located at 6001 South Perkins Road, Oxnard, California (Oxnard Public Works 2015). The OWTP treats and discharges wastewater pursuant to National Pollutant Discharge Elimination System Order No. R4-2013-0094, adopted by the Los Angeles Regional Water Quality Board on June 6, 2013. The project would generate domestic wastewater from restroom facilities, which would be treated by the OWTP.

There is currently no connection to the sanitary sewer at the project site. It is unknown if the nearest connection can support the proposed project. Therefore, this issue will be further analyzed in the EIR.

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Potentially Significant Impact. The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 students onsite. This will entail construction of significant hardscape surfaces that may impede groundwater infiltration and increase runoff. Therefore, potential impacts associated with groundwater recharge will be analyzed in the EIR.

The OSD institutes a standard educational schedule, resulting in approximately 181 school days. Applying an average demand factor of 5.4 gallons per student per school day (Mays 2001), the project will require an additional 1,857,060 gallons (5.7 acre-feet) of water annually. Therefore the impacts to groundwater resources will be further analyzed in the EIR.

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on site or off site?**

Potentially Significant Impact. The project would result in a change in the runoff patterns in the local area because the site would be converted from agricultural uses to educational uses, thereby increasing the amount of hardscape on the site and potentially increasing runoff in the area. The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. This will entail construction of significant hardscape surfaces that may impede groundwater infiltration and increase runoff. The potential project erosion impacts and storm water impacts to the City of Oxnard Storm Water Drainage System have not been analyzed, therefore the impacts to drainage patterns will be further analyzed in the EIR.

- d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site?**

Potentially Significant Impact. The project is not located near the Santa Clara River or perennial surface streams. Therefore, the proposed project would not alter the course of a stream or river. However, the proposed project will entail construction of significant hardscape surfaces that may impede groundwater infiltration and increase runoff. Therefore, potential impacts from stormwater drainage will be analyzed in the EIR.

- e. Would the project create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Potentially Significant Impact. Refer to responses 2.4.9c and 2.4.9d. The new facilities would increase the total impervious surface area of the site by more than 5,000 square feet; therefore, the project must comply with the *Ventura County Technical Guidance Manual (TGM) for Stormwater Quality Control Measures* (Ventura County Watershed Protection District 2011). The TGM provides guidance for the implementation of storm water management control measures in new development and redevelopment projects in the County of Ventura and the incorporated cities therein for any project that would increase impervious surfaces by more than 5,000 square feet. These issues will be evaluated further in the EIR.

- f. Would the project otherwise substantially degrade water quality?**

Potentially Significant Impact. The new facilities would increase the total impervious surface area of the site by more than 5,000 square feet; therefore, the project must comply with the *Ventura County TGM for Stormwater Quality Control Measures* (Ventura County Watershed Protection District 2011). The TGM provides guidance for the implementation of storm water management control measures in new development and redevelopment projects in the County of Ventura and the incorporated cities therein. Potential project related impacts to water quality will be evaluated further in the EIR.

- g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map or other flood hazard delineation map?**

No Impact. No housing is located on the project site and no housing is proposed as part of the project. Therefore, no project impact to housing would result.

- h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows?**

Potentially Significant Impact. As shown in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) for Ventura County and Incorporated Areas, the Site is located within a Zone X Other Flood Area (FEMA 2010a and 2010b). According to the legend included on FIRM Panels 06111C0905E (FEMA 2010a) for Ventura County and Incorporated Areas, the Zone-X Other Flood Areas designation indicates areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than one foot, or with drainage areas less than one square mile; and areas protected by levees from the 1% annual chance flood. The Santa Clara River levee that lines the northwest Site boundary is accredited by FEMA. A note on the FEMA map for the Site area states:

“Note: this area is shown as being protected from the 1-percent-annual-chance of greater flood hazard by a levee system that has been provisionally accredited. Overtopping or failure of any levee system is possible. For additional information, see the “provisionally accredited levee note” in the Notes to Users.”

The “provisionally accredited levee note” in the Notes to Users States:

“Check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1-percent-annual-chance action level) and Emergency Action Plan, on the levee system(s) shown as providing protection for areas on this panel. To maintain accreditation, the levee owner of community is required to submit the data and documentation necessary to comply with Section 65.10 of the NFIP regulations by December 1, 2009. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicate the levee system does not comply with Section 65.10 requirements, FEMA will revise the flood hazard and risk information for this area to reflect de-accreditation of the levee system. To mitigate flood risk in residual risk areas, property owners and residents are encouraged to consider flood insurance and flood proofing or other protective measures.”

The project site is located approximately 1.75 miles south of the Santa Clara River 1 (SCR-1) Levee System. The SCR-1 levee system is comprised of 4.72 miles of levee including multiple groins, drains, and gates with potential impacts to the City of Oxnard as well as unincorporated areas of Ventura County. The levee system was designed and constructed by the U.S. Army Corps of Engineers (USACE) in 1961 and is currently owned and maintained by the Ventura County Watershed Protection District (VCWPD) (Tetra Tech 2015).

The SCR-1 levee system was originally designed to control the USACE’s calculated Standard Project Flood discharge of 225,000 cubic feet per second emanating from the Santa Clara River watershed. The existing levee height varies from approximately four feet to 13 feet. The compacted fill embankment slopes at (2H to 1V) on both the landward and riverward sides of the levee and has a top width of 18 feet. The riverward side of the embankment has a 1.5-foot to 2-foot thick rock revetment, and was grouted

with concrete in the vicinity of the highway bridges. The rock revetment extends from the top of the embankment to varying depths (Tetra Tech 2015).

Pursuant to the FEMA Levee Certification program, the SCR-1 levee system does not currently meet requirements under Title 44 of the Code of Federal Regulations (44 CFR) Section 65.10 which outlines the minimum design, operation, and maintenance standards levee systems must meet in order to be recognized as providing protection from the base flood on a Flood Insurance Rate Map. As part of work associated with FEMA Levee Certification, Tetra Tech performed a field investigation that identified deficiencies in the SCR-1 levee system which require rehabilitation (Tetra Tech 2015).

In addition, the most recent USACE periodic inspection report, *Santa Clara River I Levee System, Periodic Inspection Report No. 1*, dated August 2011, rated the SCR-1 levee segment/system as “unacceptable”, resulting in the levee systems being put on “inactive” status in the USACE PL 84-99 Program. As such, the SCR-1 levee system is currently ineligible for federal funding for repairs if damaged during a flood event. The VCWPD is currently seeking conditional reinstatement of PL 84-99 eligibility by developing and executing a System-Wide Improvement Framework (SWIF) Plan to correct complex deficiencies (Tetra Tech 2015).

The SCR-1 levee is not fully accredited; therefore, evaluation of potential flood hazard at the site will be further analyzed in the EIR.

i. Would the project expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

Potentially Significant Impact. As noted in response 2.4.9 h, the Federal FEMA FIRM for Ventura County and Incorporated Areas, indicate that the Site is located within a Zone X Other Flood Area (FEMA 2010), and in an area protected from the 1-percent-annual-chance of greater flood hazard by the SCR-1 levee system that has been provisionally accredited by FEMA. Pursuant to the FEMA Levee Certification program, the SCR-1 levee system does not currently meet requirements under Title 44 of the Code of Federal Regulations (44 CFR) Section 65.10 which outlines the minimum design, operation, and maintenance standards levee systems must meet in order to be recognized as providing protection from the base flood on a Flood Insurance Rate Map.

A dam that stores more than 1,000 acre-feet of water, is higher than 150 feet, and has the potential to cause downstream property damage is classified as a high hazard dam by FEMA. A review of Section 2.11 and Figures 2.11.1 and 2.11.2 of the *Ventura County General Plan, Hazards Appendix* (County of Ventura 2013) and Section 4.3.3.1 and Tables 4-5, 4-6, and, 4-7, and Figure 4-3 of the *Multi-Jurisdictional Hazard Mitigation Plan for Ventura County, California* (County of Ventura 2005) indicates that there are four major reservoirs in the Santa Clara River watershed upstream of the project site that are FEMA high hazard dams that would inundate the Site area in the event of a reservoir failure. Information for each of these dams is summarized below.

Santa Felicia Dam: The Santa Felicia Dam (Lake Piru) is operated by the United Water Conservation District (UWCD), can hold up to 100,000 acre-feet of water, and is located on Piru Creek approximately 35 miles upstream of the Site (Figure 3-4).

Castaic Dam. The Castaic Dam is operated by the California Department of Water Resources (CDWR), can hold up to 325,000 acre-feet of water, and is located on Castaic Creek approximately 45 miles upstream of the Site.

Pyramid Dam. The Pyramid Dam is operated by the CDWR, can hold up to 179,000 acre-feet of water, and is located on Piru Creek approximately 20 miles upstream of the Santa Felicia Dam and 55 miles upstream of the Site.

Bouquet Canyon Dam. The Bouquet Canyon Dam is operated by the Los Angeles Department of Water and Power (LADWP), can hold up to 36,500 acre-feet of water, and is located approximately 60 miles upstream of the Site.

There is a risk for hazard involving flooding, including flooding as a result of the failure of a levee or dam from failure of SCR-1 levee and the potential for failure of four dams in the Santa Clara River watershed. Therefore, the impacts from the failure of a levee or dam are potentially significant and will be evaluated further in the EIR.

j. Would the project contribute to inundation by seiche, tsunami, or mudflow?

No Impact. The project site is located at an average mean sea level elevation of approximately 44 feet, and there are no enclosed large bodies of water in the immediate vicinity of the property. The project site is located in an area of relatively flat topography and is not near any hills or watercourses that would generate mud flows. The site is located outside areas mapped as subject to Tsunami/Seiche as delineated in the *Ventura County General Plan, Hazards Appendix* (County of Ventura 2013). Therefore, tsunamis and seiche are not considered to be potential hazards to the site and there is no impact.

2.4.10 LAND USE AND PLANNING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?			X	
b.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	X			
c.	Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion:

a. Would the project physically divide an established community?

Less Than Significant Impact. The proposed project would not physically divide an established community. Access to the surrounding area would still be available via the existing roadway network including Patterson Road and Doris Avenue. Therefore, issue will not be discussed further in the EIR.

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. The project site is located in unincorporated Ventura County and is within the Ventura County SOAR boundary. It is also within the City of Oxnard’s SOI, City Urban Restriction Boundary (CURB), and the Oxnard Airport SOI. The project would include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. Therefore, the EIR will evaluate the potential for the proposed project to conflict with applicable land use plans, policies and regulations.

c. Would the project conflict with any applicable habitat conservation plan or natural communities conservation plan?

No Impact. The project site is not included in any state, regional, or local habitat conservation plans. Therefore, no impacts would occur and this issue will not be addressed in the EIR.

2.4.11 MINERAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

Discussion:

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No Impact. The project site is not located within a mineral resource area based on the Ventura County General Plan Resource Protection Map (Ventura 2010). Therefore, no project impact on known mineral resources would result and this issue will not be further evaluated in the EIR.

- b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

No Impact. The project site has been previously disturbed by agricultural activities and is not identified as a mineral resource area in the Ventura County General Plan. Further, mineral resource recovery operations are not considered a compatible land use within close proximity to existing residential development, so even if the resource still existed in this location, establishment of a mineral resource recovery operation on the project site would not be recommended. As such, project implementation would not result in the loss of availability of a locally important mineral resource recovery site and this issue will not be evaluated further in the EIR.

2.4.12 NOISE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	X			
b.	Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	X			
c.	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
d.	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X			
e.	Be located within an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	X			
f.	Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?				X

Discussion:

- a. **Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Potentially Significant Impact. A technical noise analysis will be prepared to evaluate the potential impacts from the construction and operation of the proposed project related to applicable noise standards and this issue will be addressed in the EIR.

- b. **Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

Potentially Significant Impact. Operation of the school would not generate perceivable vibration levels; however, construction of the classroom buildings and site grading would require the use of equipment that could generate significant vibration levels. Possible sources of vibration may include bulldozers, dump trucks, backhoes, rollers, and other construction equipment that produces vibration. Therefore, this issue will be analyzed in the EIR.

- c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

Potentially Significant Impact. The existing dominant noise sources in the vicinity of the project site include traffic noise associated with Doris Avenue and Patterson Road. Other sources of noise in the vicinity may come from nearby residents' and from agricultural operations (equipment). The proposed project would add a new K-5 elementary school and 6-8 middle school to the project site that may periodically increase ambient noise levels. Therefore, this issue will be analyzed in the EIR.

- d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Potentially Significant Impact Mitigation. Construction of the proposed school is anticipated to begin in 2019 and may result in a temporary or short-term periodic increase in ambient noise levels associated with construction equipment. Therefore, this issue will be analyzed in the EIR.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Potentially Significant Impact. The project site is located within the Oxnard Airport SOI. The airport runway midfield point is located approximately 1,800 feet south of the project site. Oxnard Airport is an active general aviation/small scheduled service airport with approximately 107 based aircraft and approximately 54,500 operations a year (Caltrans 2014). Therefore, the EIR will evaluate the potential for the proposed project to expose people residing or working in the project area to excessive noise levels.

- f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

No Impact. Maps and aerial photos for the project region show no private airstrips close enough to generate a significant noise impact at the proposed site. Therefore, there would be no impact to the proposed project from private airstrips and this issue will not be addressed in the EIR.

2.4.13 POPULATION AND HOUSING

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	X			
b.	Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?				X
c.	Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?				X

Discussion:

- a. **Would the project induce substantial population growth in an area, either directly (e.g., by proposing new homes and business) or indirectly (e.g., through extension of roads or other infrastructure)?**

Potentially Significant Impact. The proposed project is needed to accommodate existing and anticipated future enrollment in OSD. Increased demand for school services is generally linked to changes in local land use patterns such as the construction of new dwelling units and the generation of new jobs that encourages new people to move into the area. No housing is proposed as a part of the project. The proposed project would generate some new jobs. Additional staff would include teachers, administrative, and support staff. Most or all of the additional staff could be hired from the existing qualified applicant pool already residing within or near the District. However, if teachers or other staff are hired outside the District area to fill a specific role(s), it may result in a few new people and their families moving into surrounding neighborhoods, thus creating a slight increase in the local population. The proposed project does include infrastructure improvements that may indirectly induce population growth. Therefore, this issue will be evaluated in the EIR.

- b. **Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

No Impact. The project site is vacant undeveloped land that does not contain any housing. Therefore, the proposed project would not displace housing necessitating the construction of replacement housing elsewhere and no project impact would result.

- c. **Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

TETRA TECH, INC.

No Impact. The project site is vacant undeveloped land that does not contain any housing. Therefore, no people would be displaced requiring replacement housing and no project impact would result.

2.4.14 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i.) Fire protection?	X			
ii.) Police protection?	X			
iii.) Schools?				X
iv.) Parks?			X	
v.) Other public facilities?			X	

Discussion:

a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

- i.) **Fire Protection; and**
- ii.) **Police Protection**

Potentially Significant Impact. The project includes a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. The proposed project would be designed and constructed to meet required fire protection standards including adequate emergency access. As a public school, the proposed project would be anticipated to generate similar types of calls as the residential uses located

nearby. Nonetheless, the EIR will evaluate the potential physical impacts on the environment for fire and police protection services and this issue will be analyzed further in the EIR.

iii.) Schools

No Impact. The proposed project includes educational facilities including a new K-5 elementary school and 6-8 middle school needed to accommodate existing and anticipated future enrollment in the OSD. The increased school capacity with the proposed project would have a beneficial impact on public school facilities. Therefore, no adverse project impact on public school facilities would result.

iv.) Parks

Less Than Significant Impact. The proposed project is not dependent upon City parks for student recreational needs. The proposed project includes educational facilities including a new K-5 elementary school and 6-8 middle school that are designed to meet the educational and recreational needs of K-8 students' onsite. Recreational facilities to be provided on campus include soccer fields, tennis courts, hard courts, and play fields. Therefore, project impact would be less than significant and this issue will not be further analyzed in the EIR.

v.) Other Public Facilities

Less Than Significant Impact. The proposed project would not result in substantial increased demand for other public facilities such as libraries. The proposed project is designed to meet the educational and recreational needs of K-8 students' onsite. Therefore, project impact is less than significant and this issue will not be further analyzed in the EIR.

2.4.15 RECREATION

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	X			

Discussion:

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Less Than Significant Impact. The City of Oxnard Recreation & Community Services Department provides park and recreation services in the City. The proposed project is not dependent upon City parks for student recreational needs. The proposed project includes educational facilities including a new K-5 elementary school and 6-8 middle school that are designed to meet the educational and recreational needs of K-8 students’ onsite. Recreational facilities to be provided on campus include soccer fields, tennis courts, hard courts, and play fields. Therefore, project impact would be less than significant and this issue will not be further analyzed in the EIR.

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

Potentially Significant Impact. The proposed project includes educational facilities designed to meet the educational and recreational needs of K-8 students’ onsite. Recreational facilities to be provided on campus include soccer fields, tennis courts, hard courts, and play fields. Potential environmental impacts associated with the proposed project, including recreational areas, are discussed by environmental resources topic throughout this Initial Study (IS). Per CEQA Guidelines Section 15378, a “project” means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. Therefore, topics identified for further analysis in the EIR will include analysis for the whole project including potential impacts related to new recreational facilities.

2.4.16 TRANSPORTATION/TRAFFIC

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	X			
b.	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	X			
c.	Result in a change in air traffic patterns including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	X			
e.	Result in inadequate emergency access?	X			
f.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	X			

Discussion:

- a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Potentially Significant Impact. A traffic study will be conducted for the proposed project. As part of this study, traffic counts at up to eight intersections will be collected for AM and PM peak hours. Trip generation estimates will be determined for the project site based on anticipated enrollment and standard trip generation rates and other sources. The trip generation will be coordinated with City staff. Trips will be distributed based on school routes and student information. The traffic study will calculate intersection levels of service for existing conditions, cumulative conditions and 2030 General Plan conditions with and without the proposed project. The traffic study will identify feasible mitigation measures where applicable. Cumulative conditions will be developed based on a list of related (approved and pending) projects provided by City staff and 2030 General Plan traffic data from the Oxnard Traffic Model. The results of the traffic study will be summarized in the EIR. Therefore, the potential for the proposed project to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system will be evaluated in the EIR based on the results of the traffic study.

- b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

Potentially Significant Impact. A traffic study will be prepared for the proposed project and the potential for the proposed project to conflict with applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways will be evaluated in the EIR.

- c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

No Impact. The nearest airport to the project site is Oxnard Airport, which is 1,800 feet south of the site. Establishment of educational facilities on the project site is not anticipated to affect air traffic levels at the Oxnard Airport, or change the location of the flight paths. Therefore, no project impact would result.

- d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Potentially Significant Impact. The proposed project would be designed and constructed to meet required standards including adequate emergency access. A review of project site access and circulation plan, including bicyclist and pedestrian access and safety will be conducted as part of the traffic study. Therefore, this issue will be further evaluated in the EIR.

- e. Would the project result in inadequate emergency access?**

Potentially Significant Impact. The proposed project would be designed and constructed to meet required standards including adequate emergency access. While no impacts to emergency access are anticipated, a review of project site access will be conducted as part of the traffic study and the results documented in the EIR.

- f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

Potentially Significant Impact. The proposed project includes educational facilities that are not anticipated to conflict with adopted policies, plans, or programs regarding public transit. Nonetheless, a traffic study is being prepared for the proposed project and this issue will be addressed in the EIR.

2.4.17 UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Exceed wastewater treatment requirements of the applicable regional water quality control board?	X			
b.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
c.	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X			
d.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	X			
e.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	X			
f.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g.	Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion:

- a. **Would the project exceed wastewater treatment requirements of the applicable regional water quality control board?**

Potentially Significant Impact. The project site is located within the jurisdiction of the Los Angeles RWQCB. Since the project would disturb greater than one acre of land during construction, the project

must comply with State Water Resources Control Board Order No. 2009-0009-DWQ, *National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit). Therefore, this issue will be analyzed in the EIR.

- b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Potentially Significant Impact. The proposed project includes a reorganization which will be comprised of an annexation into the Calleguas Municipal Water District. Water, wastewater, and recycled water need to be extended to the site. Therefore, potential impacts on water and wastewater treatment facilities with implementation of the proposed project will be evaluated in the EIR.

- c. Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

Potentially Significant Impact. The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. This will entail construction of significant hardscape surfaces that may impede groundwater infiltration and increase runoff. Therefore, potential impacts from stormwater drainage will be analyzed in the EIR.

- d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

Potentially Significant Impact. The proposed project includes a reorganization which will be comprised of an annexation into the Calleguas Municipal Water District. Implementation of the proposed project would require water service. Therefore, potential impacts to water supply will be evaluated in the EIR.

- e. Has the wastewater treatment provider that serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Potentially Significant Impact. Implementation of the proposed project would require wastewater treatment services and connection to the project site. Therefore, potential impacts to wastewater treatment capacity will be evaluated in the EIR.

- f. Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

Less than Significant Impact. Waste in the City of Oxnard is primarily transported to the Simi Valley Landfill & Recycling Center (SVLRC) and Toland Road Landfill (CalRecycle 2015). The Toland Road Landfill is a permitted and active landfill that can accept mixed municipal, construction/demolition, agricultural, industrial, and sludge (biosolids) waste. As of June 1, 2006 the remaining capacity was 21,983,000 cubic yards with an estimated closure date of May 31, 2027 (CalRecycle 2017). The SVLRC

is a fully permitted non-hazardous municipal solid waste landfill and recycling facility. The SVLRC provides approximately 60% of Ventura County's daily refuse disposal needs, and 75% of all tons accepted at the SVLRC originate in Ventura County. The SVLRC is permitted to accept up to 3,000 tons per day of refuse and can accept 6,250 tons of recyclable materials. The SVLRC, on average, recycles approximately 25% of all tons accepted (Waste Management 2017). As of April 3, 2012 the remaining landfill capacity was 119,600,000 cubic yards and has an estimated closure date of January 31, 2052 (CalRecycle 2017). Therefore, the proposed project would be served by a landfill with sufficient capacity and project impact would be less than significant.

g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed project would not generate a substantial amounts of solid waste and the project would comply with applicable federal, state, and local statutes and regulations related to solid waste. Project construction waste would be recycled to the extent feasible. Recycle bins for paper, bottles and cans would be provided on campus as part of long-term school operations. Therefore, project impact would be less than significant.

2.4.18 TRIBAL CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a.	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	X			
ii.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe	X			

Discussion

- a. **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe?, and that is:**
 - i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

Potentially Significant Impact. As discussed in section 2.4.5 Cultural Resources, a literature and records search will be conducted of the cultural resource site and project file collection at the SCCIC for the project site and a one-mile buffer. As part of this search, the local register(s) for historical resources and

the California Inventory of Historical Resources/CRHR will be reviewed for CRHR eligible or listed properties, historic districts, and historic landmarks. In addition, pursuant to AB 52 (as amended) requires a lead agency to evaluate a project's potential to impact "tribal cultural resources" (as defined by PRC § 21074 (a)). Under AB 52, the lead agency is also required to consult with any California Native American tribe that has previously requested that the lead agency provide the tribe with notice of such projects and consultation, and is traditionally and culturally affiliated with the geographic area of a proposed project. Consultations must include discussing the type of environmental review necessary, the significance of tribal cultural resources, and the significance of the project's impacts on the tribal cultural resources (as applicable), and alternatives and mitigation measures recommended by the tribe. In order to begin this process, the District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. This issue will be evaluated in the EIR.

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe**

Potentially Significant Impact. As discussed above and in section 2.4.5 Cultural Resources, a literature and records search will be conducted of the cultural resource site and project file collection at the SCCIC to identify CRHR eligible or listed properties, historic districts, and historic landmarks. Also discussed above, pursuant to AB 52 (as amended) the lead agency will initiate consultation with California Native American tribe to identify and address the significance of, and potential project adverse impacts to tribal cultural resources (as defined by Public Resource Code § 21074 (a)). The District sent letters to Native American contacts whom have requested notification of projects within their geographic area of traditional and cultural affiliation. A clear determination cannot be made at this time, therefore this issue will be evaluated in the EIR.

2.4.19 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE					
a.	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	X			
b.	Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	X			
c.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Discussion:

- a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Potentially Significant Impact. As noted in this Initial Study analysis, several resources topics will be analyzed further in the EIR. While it is unlikely that the proposed project would substantially degrade the environment for biological or cultural resources, a clear determination cannot be made at this time and this issue will be analyzed in the EIR.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are**

considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Potentially Significant Impact. As noted in this Initial Study analysis, several resources topics will be analyzed further in the EIR. The potential for the proposed project, when combined with other foreseeable projects in the area, to result in cumulative impacts will be evaluated in the EIR.

c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. The proposed project would be designed and constructed to meet required safety standards. As identified in this Initial Study, several resources topics will be analyzed further in the EIR. Therefore, a clear determination cannot be made at this time and this issue will be analyzed in the EIR.

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3.0 LIST OF PREPARERS

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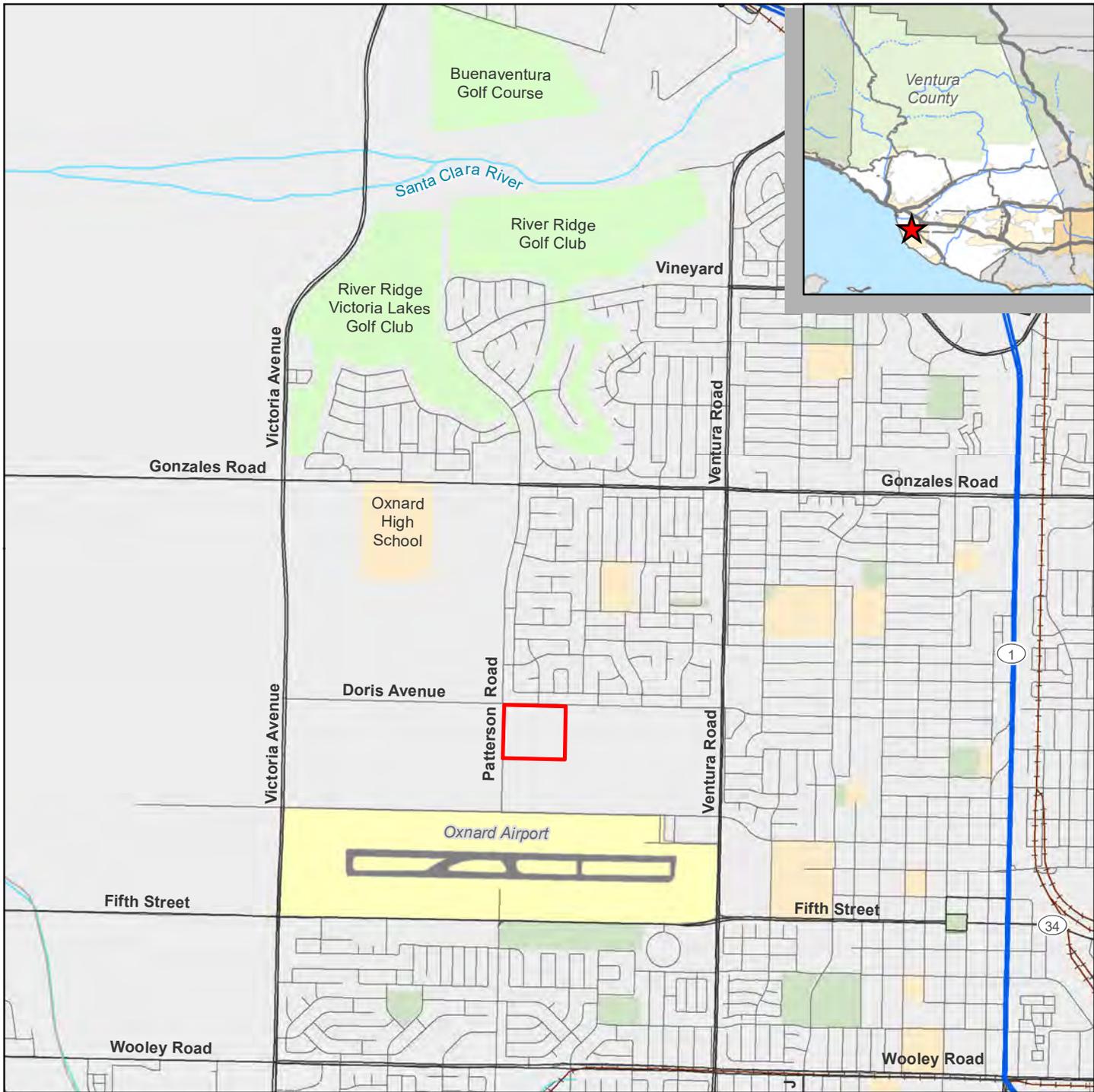
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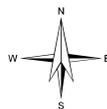
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Legend

 Project Boundary



Background Map sources: ESRI, Ventura County GIS, Tetra Tech

Oxnard School District

Project Location and Vicinity Map

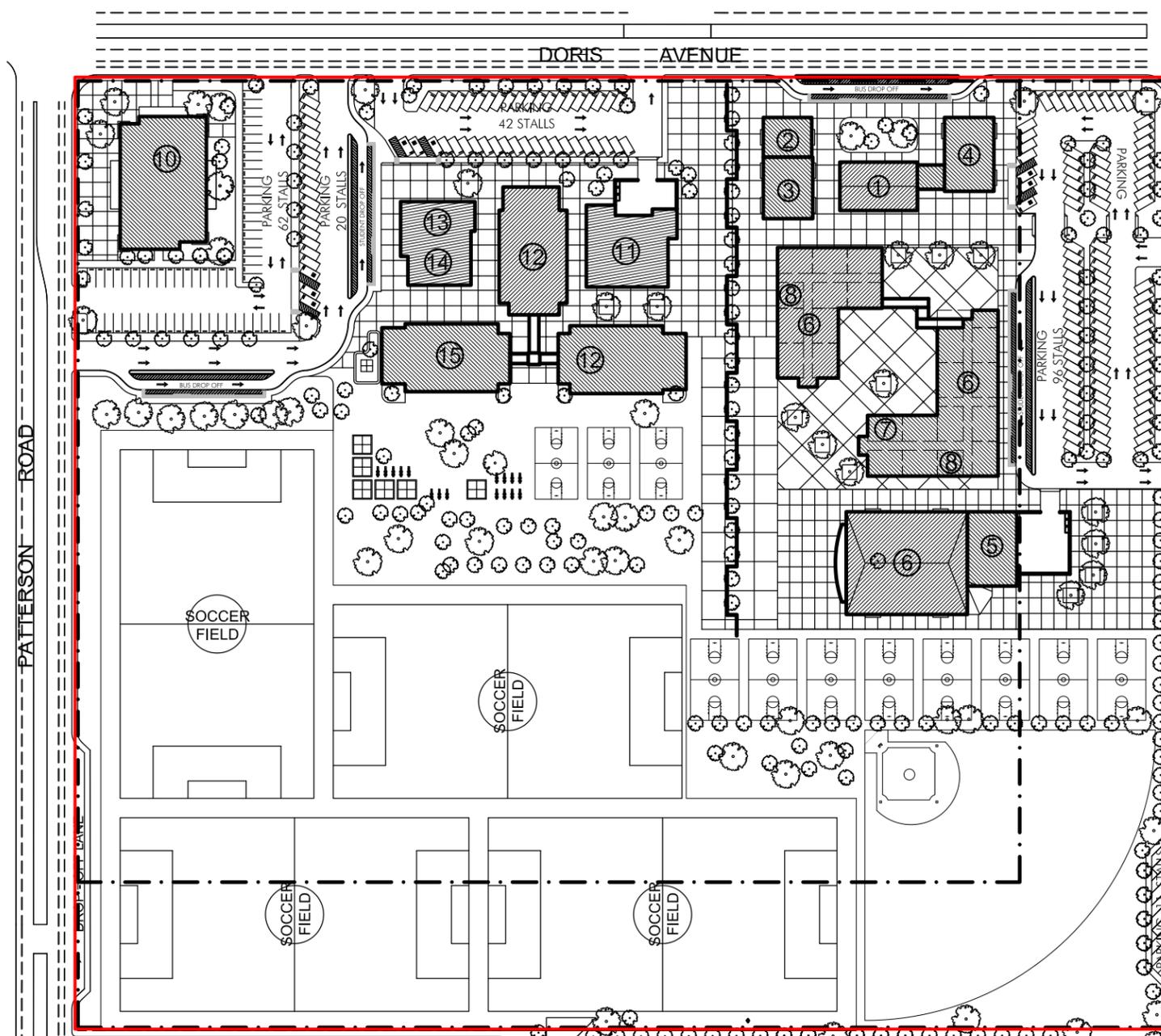
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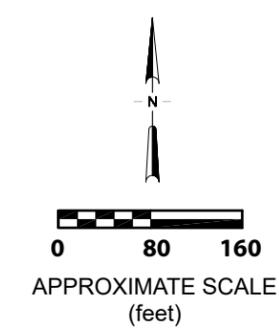
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LEGEND

SCHOOL SITE BOUNDARY ———

1. ADMIN. BLDG.	3,005 S.F.
2. MEDIA CENTER	2,000 S.F.
3. VISUAL ARTS & MUSIC	3,200 S.F.
4. STUDENT SUP. PARENT/ CONFERENCE CENTER	3,800 S.F.
5. FOOD SERVICES	3,900 S.F.
6. 2 STORY / 41 C.R. BLDG	45,312 S.F.
7. SCIENCE BLDG	2,600 S.F.
8. RESTROOMS - TOTAL AREA:	3,000 S.F.
9. GYMNASIUM	13,150 S.F.
10. 2 STORY DISTRICT OFFICE	23,665 S.F.
11. MULTI-PURPOSE & FOOD SERV. BLDG	5,375 S.F. 3,600 S.F.
12. 2 STORY / 23 C.R. BLDG	22,560 S.F.
13. ADMIN.	3,005 S.F.
14. MEDIA CENTER & STUDENT SUPPORT SERV.	2,700 S.F. 1,510 S.F.
15. KINDERGARTEN	6,400 S.F.



Oxnard School District

Conceptual Site Map

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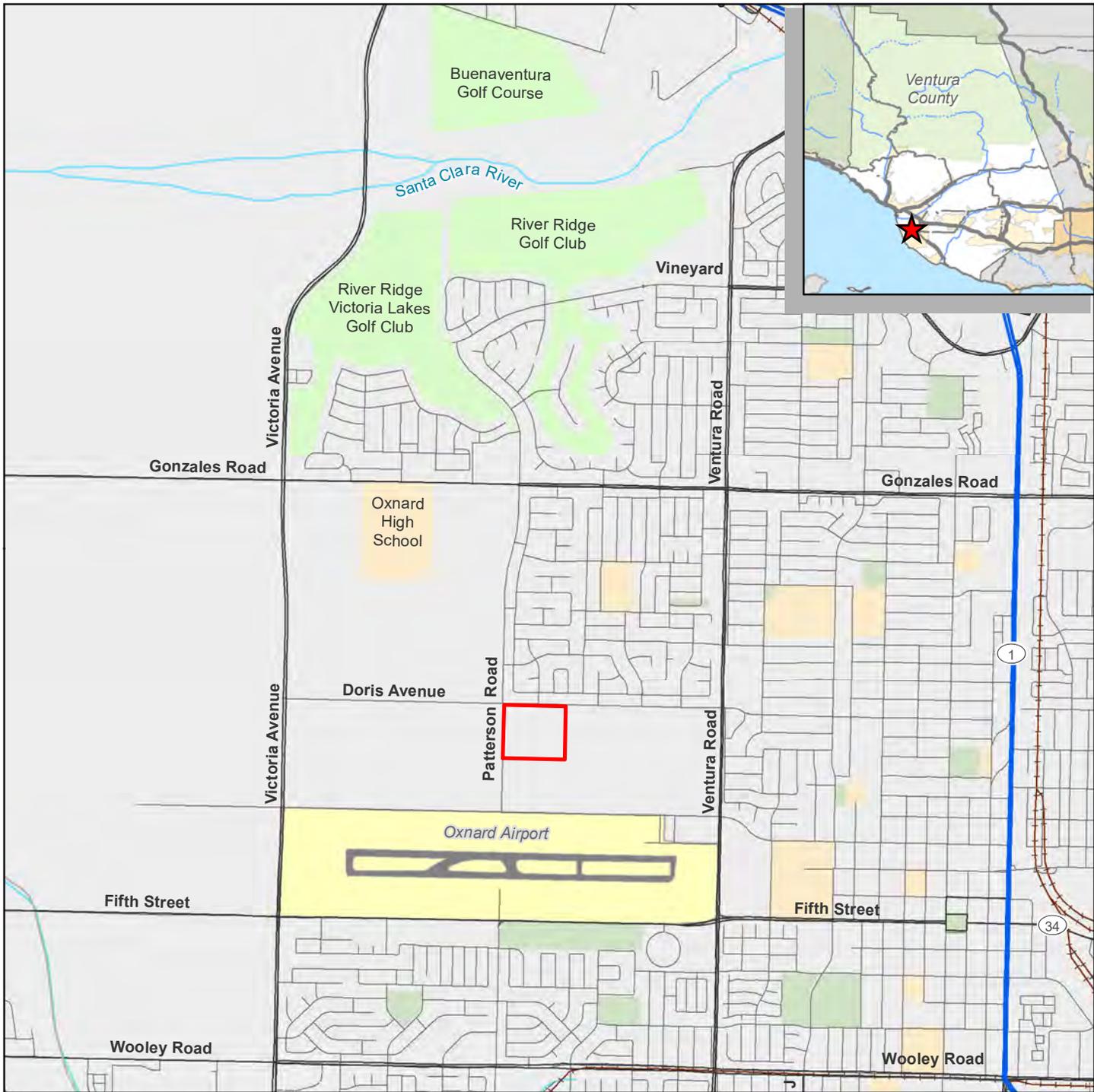
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Map source: Conceptual Doris/Patterson Site Preliminary Study, Job No. 2749 (Flewelling & Moody).

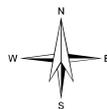
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Legend

 Project Boundary



Background Map sources: ESRI, Ventura County GIS, Tetra Tech

Oxnard School District

Project Location and Vicinity Map

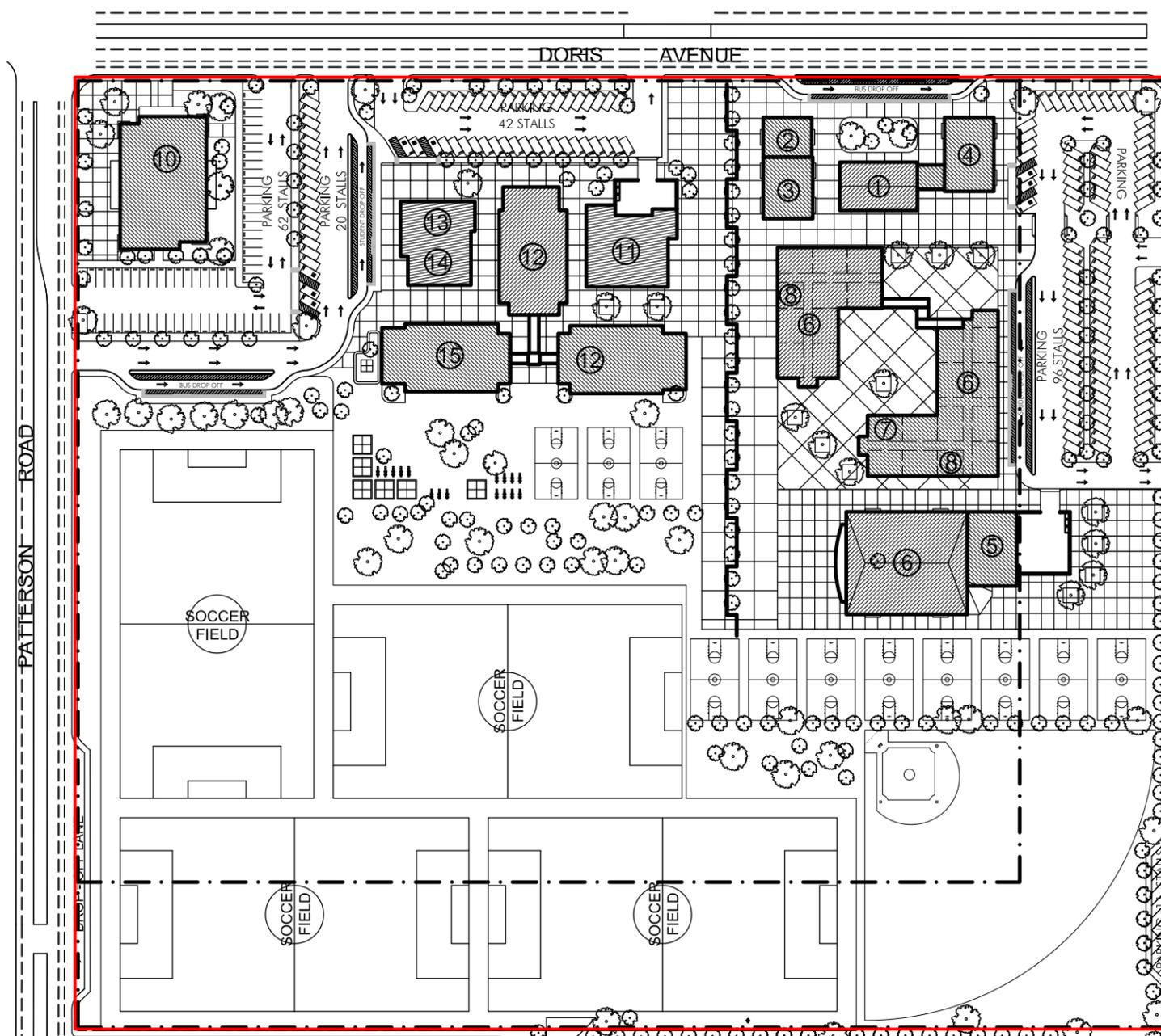
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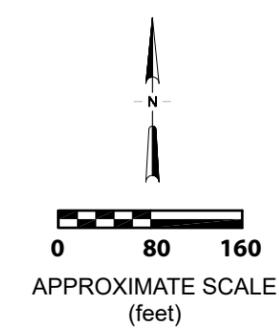
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SCHOOL SITE BOUNDARY ——

1. ADMIN. BLDG.	3,005 S.F.
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Oxnard School District

Conceptual Site Map

Doris Patterson
Educational Facilities Project

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Map source: Conceptual Doris/Patterson Site Preliminary Study, Job No. 2749 (Flewelling & Moody).

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Public Scoping Meeting for the Doris/Patterson Educational Facilities Project Environmental Impact Report

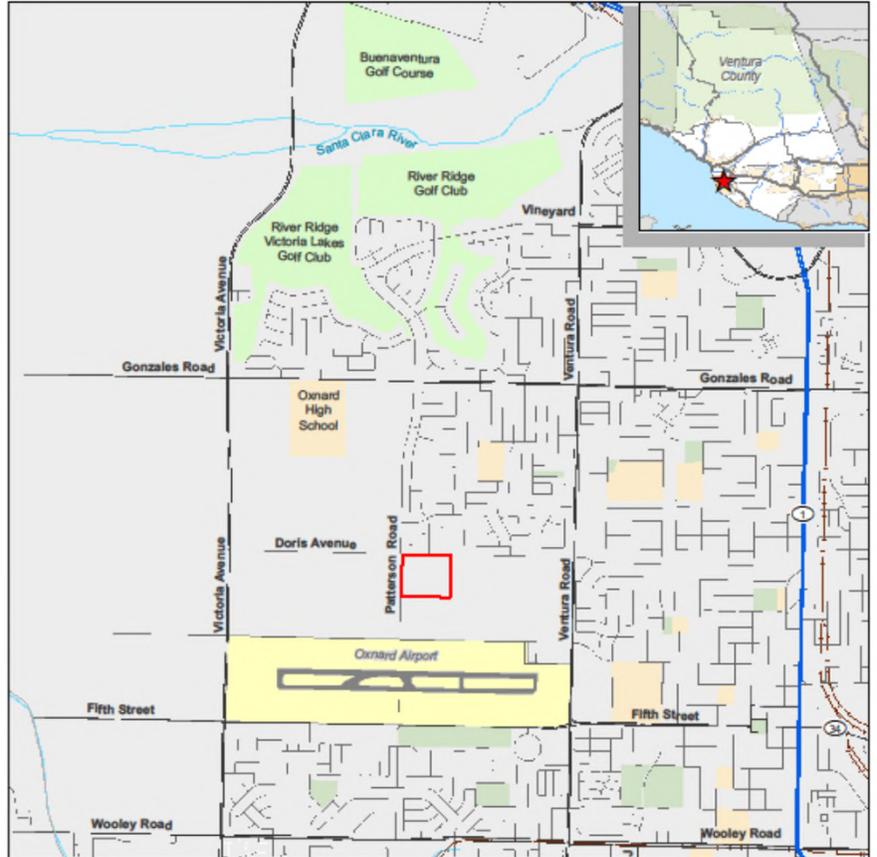
MAY 22, 2017

Scoping Meeting Agenda:

- ▶ Introductions
- ▶ Description of Proposed Project
- ▶ Summary of the Environmental Review Process
- ▶ Public comments

Project Location

- ▶ Southeast corner of Doris Avenue and North Patterson Road, Ventura County, CA.
- ▶ The project site is located in unincorporated Ventura County.
- ▶ The project site is also within the City of Oxnard's Sphere of Influence (SOI), City Urban Restriction Boundary (CURB), and within the Oxnard Airport SOI.

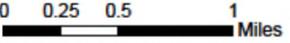


Legend
 Project Boundary



Oxnard School District
**Project Location
 and Vicinity Map**
 Doris Patterson
 Educational Facilities Project

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 Suite 130
 Santa Barbara, CA 93111

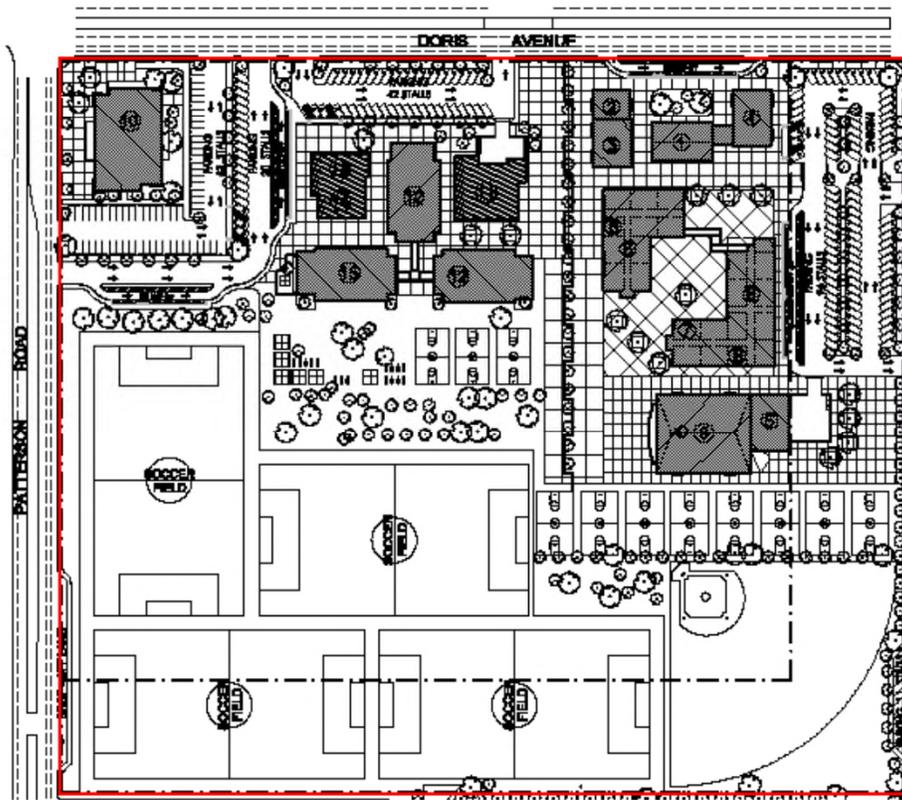


Background Map sources: ESRI, Ventura County GIS, Tetra Tech

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Proposed Project

- ▶ Oxnard School District proposes to construct and operate joint-use facilities to support 700 elementary school students in grades K-5, 1,200 middle school students in grades 6-8, and a potential future district office.
- ▶ The school facilities are designed to meet the educational and recreational needs of K-8 students onsite.
- ▶ In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite.
- ▶ The proposed project includes utility connections including water, sewer, gas, electric, data/telecommunications, and storm water collection.



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SCHOOL SITE BOUNDARY —

- 1. ADMIN. BLDG. 3,006 S.F.
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- 8. RESTROOMS - TOTAL AREA 3,000 S.F.
- 9. GYMNASIUM 13,160 S.F.
- 10. 2 STORY DISTRICT OFFICE 23,666 S.F.
- 11. MULTI-PURPOSE B. FOOD SERV. BLDG 6,376 S.F. 3,500 S.F.
- 12. 2 STORY / 23 C.R. BLDG 22,660 S.F.
- 13. ADMIN. 3,006 S.F.
- 14. MEDIA CENTER & STUDENT SUPPORT SERV. 1,510 S.F.
- 16. KINDERGARTEN 6,400 S.F.



APPROXIMATE SCALE
(feet)

Oxnard School District

Conceptual Site Map

Doris Patterson
Educational Facilities Project

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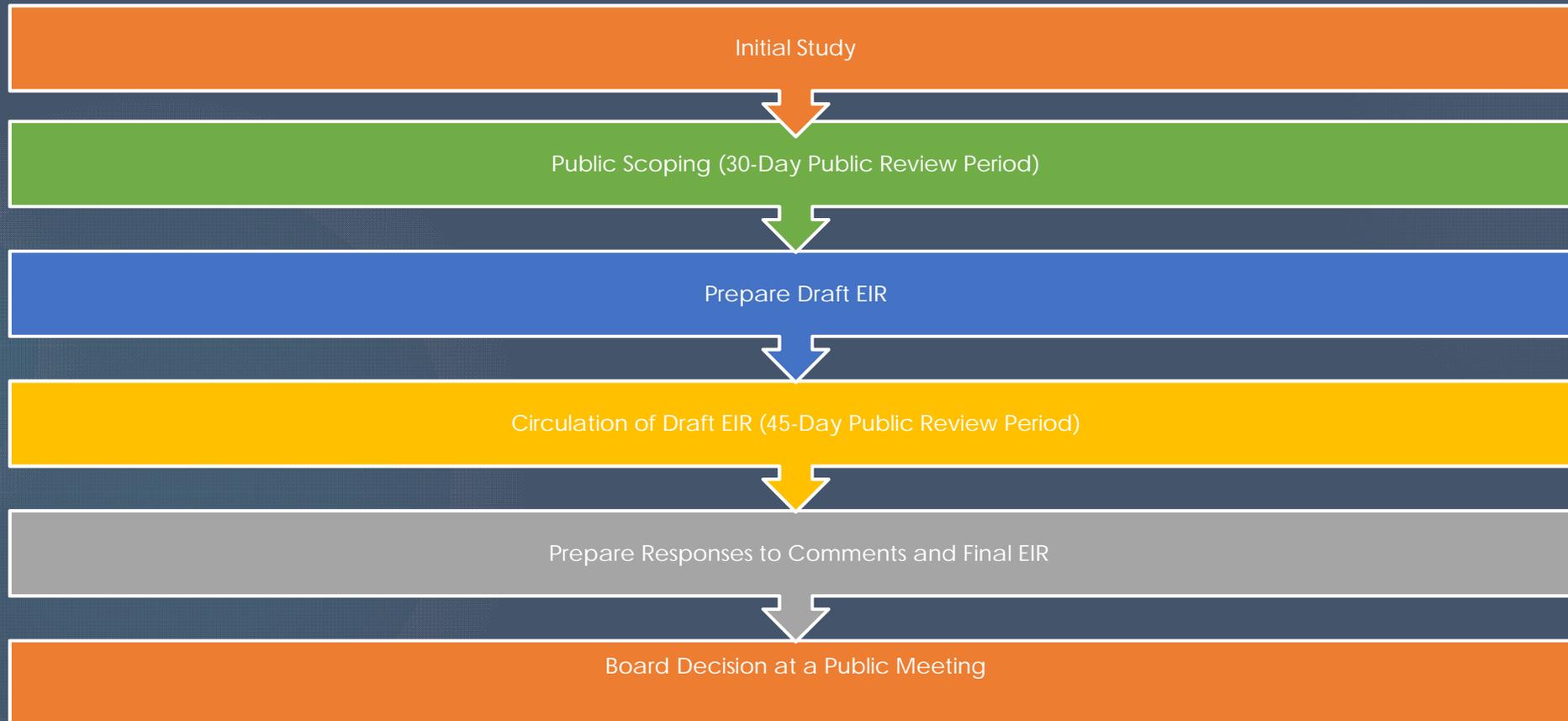
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Map source: Conceptual Doris/Patterson Site Preliminary Study, Job No. 2740 (Flewelling & Moody).

Proposed Project

- ▶ The project would include a proposed reorganization which would be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33.
- ▶ The District would process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action.
- ▶ If the project is approved by the City Council, the City will file a Resolution of Application with the Ventura Local Agency Formation Commission (LAFCo). Upon approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

Environmental Review Process



Initial Study

- ▶ Oxnard School District has prepared an Initial Study and determined that an Environmental Impact Report (EIR) is required.
- ▶ The EIR will be prepared to evaluate potentially significant impacts related to the following issues:
 - Aesthetics
 - Agriculture
 - Air Quality
 - Biological Resources
 - Cultural Resources
 - Geology/Soils
 - Greenhouse Gas Emissions
 - Hazards/Hazardous Materials
 - Hydrology/Water Quality
 - Land Use Planning
 - Noise
 - Population
 - Public Services
 - Recreation
 - Transportation/Traffic
 - Tribal Cultural Resources
 - Utilities/Service Systems

Public Scoping

- ▶ The Notice of Preparation comment period began on May 11, 2017 and ends on June 9, 2017.
- ▶ The public scoping process is intended to provide Oxnard School District (as the Lead Agency for CEQA) with the information the public feels is necessary to establish the appropriate scope for preparing the Environmental Impact Report (EIR).
- ▶ Please provide your comments, input, suggestions for project alternatives, and any other pertinent information that may enable us to prepare a comprehensive EIR for the proposed project.

Public Comments

- ▶ In addition to speaking at today's meeting; comments can also be submitted in writing:

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South "A" Street,
Oxnard, CA 93030

- ▶ Please submit written comments by June 9, 2017. Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but not later than 30 days after receipt of the Notice of Preparation.



VENTURA COUNTY WATERSHED PROTECTION DISTRICT
WATERSHED PLANNING AND PERMITS DIVISION
800 South Victoria Avenue, Ventura, California 93009
Sergio Vargas, Deputy Director – (805) 650-4077

MEMORANDUM

DATE: June 8, 2017

TO: Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South A Street
Oxnard, CA 93030

FROM: Sergio Vargas, Deputy Director [S.V.](#)

SUBJECT: NOP-EIR - Oxnard School District - Doris Patterson Educational Facilities Project - WC2017-0038

Pursuant to your request, this office has reviewed the Initial Study for Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California, and offers the following comments.

PROJECT LOCATION:

The project is located at southeast corner of Doris Avenue and North Patterson Road, Ventura County, CA.

PROJECT DESCRIPTION:

The Oxnard School District (OSD) proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The project will include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, The Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33.

WATERSHED PROTECTION DISTRICT COMMENTS:

1. The proposed project will convert the currently agricultural land use into urban land uses with added impervious surface areas resulted from streets, building roofs, parking spaces, and so on. The initial study has correctly realize the potentially significant hydrologic, hydraulic, and water quality impacts the proposed project may have on local drainage systems and on the District's flood control facilities. The initial study indicates these potentially significant impacts will be further analyzed in EIR. The District expects any hydrologic, hydraulic, and water quality impacts will be mitigated on-site. The District expect to review and comment on the EIR when it is completed.

END OF TEXT

FOX CANYON GROUNDWATER MANAGEMENT AGENCY

A STATE OF CALIFORNIA WATER AGENCY



BOARD OF DIRECTORS

Eugene F. West, Chair, *Camrosa Water District*
David Borchard, Vice Chair, *Farmer, Agricultural Representative*
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Robert Eranio, *Director, United Water Conservation District*

EXECUTIVE OFFICER
Jeff Pratt, P.E.

June 7, 2017

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

SUBJECT: COMMENTS REGARDING DORIS AVENUE / PATTERSON ROAD EDUCATIONAL FACILITIES PROJECT INITIAL STUDY, DATED MAY 2017

Dear Ms. Cline:

Thank you for the opportunity to review the Initial Study for the proposed Doris Avenue/ Patterson Road Educational Facilities Project (Project), prepared by Tetra Tech, Incorporated. The Project is within the Oxnard Groundwater Subbasin. The Fox Canyon Groundwater Management Agency (Agency) manages the groundwater underlying the Project site and vicinity. The Agency is in the process of developing a Groundwater Sustainability Plan (GSP) for the Oxnard Subbasin in compliance with the Sustainable Groundwater Management Act (SGMA). The Project Initial Study, dated May 2017, was reviewed by Agency staff and comments are provided below along with a summary of background information.

Background

The Oxnard School District (OSD) is proposing to construct an educational facility on the southeast corner of Doris Avenue and North Patterson Road in unincorporated Ventura. The project site is within the City of Oxnard's Sphere of Influence (SOI) on approximately 25 acres of the 107.00-acre parcel identified as Assessor's Parcel Number (APN) 183-0-070-090. It is proposed that the site be annexed into the City of Oxnard and Calleguas Municipal Water District.

The Project includes joint-use facilities to support a two-story district office, a 700-student elementary school (grades K through 5) and a 1,200-student middle school (grades 6 through 8). The proposed project is to comprise approximately 148,782 square feet of building and structures, 220 parking spaces, and a variety of playing fields including but not limited to soccer fields, tennis courts, and hard courts. The Project includes utility connections for water and sewer.

Discussion / Comments

Following are discussion and Agency comments:

- 1) The Initial Study does not clearly state the source of water supply for the Project. The source of the proposed water supply should be clearly identified.

800 South Victoria Avenue, Ventura, CA 93009-1610
(805) 654-2014 FAX: (805) 654-3350
Website: www.fcgma.org

June 7, 2017

Page 2 of 2

- 2) The Initial Study does not indicate what portion of the water supply is to be groundwater extracted from within the Agency boundaries and what portion is to come from other sources such as imported water.
- 3) An estimate of the proposed water demand of "an additional" 5.4 AFY is provided in the Initial Study, but the volume does not appear to include the water demand for the OSD office, irrigation of playing fields and landscaped areas, and special events. The water demand broken down by each of the three facilities and use such as applied irrigation water as well as total project-water demand should be provided. In addition, the source of water to meet the water demand should be clearly identified in the proposed Environmental Impact Report (EIR), including the portions that are to be supplied by groundwater and imported water.
- 4) Currently, the land on which the proposed Project is to be constructed is used for agricultural purposes. The EIR should provide an analysis which determines if the Project will result in a new or increased groundwater demand.
- 5) The EIR should provide a discussion and analysis of both the individual and cumulative impacts of the Project on the Oxnard Subbasin, downgradient groundwater users. The data and analysis should be consistent with current hydrogeologic knowledge and understanding gained during development of the Oxnard Subbasin GSP. Technical studies, data, and draft documents are available on the Agency's website at www.fcgma.org. The EIR should include mitigation measures to minimize potential impacts of the Project to groundwater quantity and quality.

If you have any questions, please contact Kathleen Riedel, at (805) 654-2954, or me at (805) 650-4083.

Sincerely,



Kimball R. Loeb, PG, CEG, CHG
Groundwater Manager

Cc: Jeff Pratt, P.E., Executive Officer

June 7, 2017

Oxnard School District
Attn.: Ms. Lisa Cline, Deputy Superintendent
Business & Fiscal Services
1051 S. "A" Street
Oxnard, CA 93030

Subject: Notice of Preparation of an Environmental Impact Report for the
proposed Doris Patterson Education Facilities Project

Dear Ms. Cline,

Thank you for providing the opportunity to provide comments for the Oxnard School District's (District) Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the proposed Doris Patterson Education Facilities Project. The District also prepared an Initial Study that identified potentially significant impacts related to the proposed project. The District proposes to construct and operate a new elementary, middle school, accessory school facilities, and an administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Paterson Road in the unincorporated area of Ventura County. The proposal includes a request to annex into the City of Oxnard boundary.

The EIR should include analysis of the following issues and/or possible impacts that may not have been identified in the Initial Study/Environmental Checklist for the proposed educational facilities:

- The proposed project will be located within an area currently zoned (by Ventura County) as Agricultural Exclusive, 40-acre minimum parcel size, and within the Ventura County Save Open-Space and Agricultural Resources (SOAR) Ordinance boundary. Schools are prohibited within the County's Agriculture zone. As the City of Oxnard has not zoned the proposed project area, the District will need to identify a new zone and General Plan Land Use designation that allows schools. If the proposed zone will not be agricultural, it should be analyzed carefully in light of the SOAR Ordinance in order to determine if the proposed zone and land use designation will require voter approval.
- Conversion of agricultural land (identified as Statewide Importance by Ventura County's Important Farmland Inventory map) that is currently in agricultural production to an institutional use. The loss of Important Farmland caused by the proposed project, and possible mitigations for the loss of farmland, should be analyzed.
- The EIR should address potential compatibility conflicts between the proposed education facilities project and adjacent agricultural operations. The EIR should include a discussion of the Ventura County Agriculture Commissioner's current

agricultural-urban buffer policy. Please include an analysis of the distance and type of buffer(s) between the proposed school and the adjacent farm activities. If buffers will not be utilized in the proposed project or as mitigation measures, please explain why.

If you have any questions, please feel free to contact me.

Sincerely,



Charles Anthony, Senior Planner
Long Range Planning Section
Ventura County Planning Division
805.654.3683
charles.anthony@ventura.org

June 8, 2017

Lisa Cline, Deputy Superintendent
Business & Fiscal Services
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

Central Services Department
J. Tabin Cosio, Director

Engineering Services Department
Christopher E. Cooper, Director

Transportation Department
David L. Fleisch, Director

Water & Sanitation Department
Michaela Brown, Director

Watershed Protection District
Glenn Shephard, Director

Subject: RMA Ref. # 17-014, NOP and Initial Study for EIR

Dear Ms. Cline:

As requested, the Ventura County Watershed Protection District (VCWPD) – Groundwater Resources Division has reviewed the Initial Study Doris Avenue / Patterson Road Educational Facilities Project (Initial Study) in accordance with the County of Ventura Initial Site Assessment Guidelines (ISAG) and provides the following comments:

Project Location

The proposed project is located in the unincorporated area of Ventura County and overlies the Oxnard Plain Basin (Bulletin 118 Basin No. 4-4.02), which was identified as a high priority basin and in a condition of critical overdraft by the Department of Water Resources (DWR). The proposed project will occupy approximately 25 acres in the northwest corner of a 107-acre size parcel (APN 183-0-070-090). There is one groundwater well associated with the parcel (SWN 02N22W33N05) and used for agricultural irrigation. The site is currently used for agriculture.

Project Description

The Oxnard School District proposes to construct and operate a new elementary school, middle school, and administrative center. The proposed project includes facilities to support a district office, 700 elementary school students (grades K-5), and 1,200 middle school students (grades 6-8). The new school facilities are designed to meet the educational and recreational needs of enrolled students. The proposed project would comprise a total of approximately 148,782 square feet (sq. ft.) of buildings, structures and recreational areas that include soccer fields. The proposed project will incorporate drought tolerant landscape in accordance with the Model Water Efficiency Landscape Ordinance (MWELo) regulations adopted by the DWR.



Environmental Impact Analysis: Water Supply – Quantity

The Initial Study states the project will require an additional 5.7 acre-feet (AF) of water annually (page 2-29). This additional water quantity is the estimated future water demand for student population and does not consider additional water use that will be required for other areas such as the Cafeteria, Administrative Building, and landscape. Also, the additional water quantity of 5.7 AF/year does not take into account any current or historical water use for agricultural activities on the portion of the site the school will occupy. To estimate the additional water demand for the proposed project, a more detailed water study must be conducted that incorporates (but is not limited to) the elements listed above.

The project will also propose annexation into the City of Oxnard. According to the 2010 City of Oxnard Urban Water Management Plan and the 2010 Water Conservation Master Plan, the Oxnard City Council established a “water neutrality” policy in 2008 that requires all new development within the City of Oxnard to offset water demand associated with the project. ‘New development’ is defined as all planned and unplanned future development. Implementation of water conservation efforts must be permanent and quantifiable. The water neutrality policy has not been codified, but has been applied to every development approved project since 2008. Under the policy, a development can be water neutral by meeting its projected demand through:

- existing FCGMA groundwater allocations that are transferred to the City of Oxnard;
- contributing to increased efficiency by funding water conservation or recycled water retrofit projects;
- providing additional water supplies; or,
- any combination of these options.

The Environmental Impact Report must analyze whether compliance with the “water neutrality” policy is required and discuss how compliance is expected to be met.

Please feel free to contact me at (805) 654-5164 or alma.quezada@ventura.org to discuss any further questions.

Sincerely,



Alma Quezada
Groundwater Specialist



RECEIVED

JUN 09 2017

BUSINESS & FISCAL SERVICES

Ms. Lisa Cline
Deputy Superintendent, Business & Facilities Service
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

June 8, 2017

RE: Oxnard School District seeking to build a campus on Doris and Patterson

Dear Oxnard Elementary School District,

I am opposed to the new construction of an elementary school at the corner of Doris and Patterson for a number of reasons. According to the Ventura County Star articles over the years, there have been quite a number of crash incidents in the local area that have involved small aircraft. In the past few weeks alone, fatal crashes have occurred near Ventura and in Camarillo. As for Oxnard, there have also been a number of plane incidents in the flight path of Oxnard Airport. In 1995 a single engine plane crashed at the beach while attempting to land at Oxnard Airport with no visibility due to heavy fog. In 2013, 2 people were killed when their plane crashed in a field near Victoria Avenue and Wooley Road shortly after takeoff. (It exploded on impact) I personally remember within the past 10 years or so, when a plane trying to make an emergency landing missed the school bus maintenance garages only by a few feet (near 2nd and H Street -previous Oxnard High School site). The only reason it did not cause more damage was because the pilot was able to steer the aircraft into a baseball cage (that was left behind by the school) and the plane got stuck in the fencing. A few years before that, a plane skidded off the runway at Oxnard Airport and skidded onto Victoria Avenue. I also have heard that many years back a plane crashed into one of the homes in the Strawberry Fields Tract. Planes circle the landing strip routinely. The Oxnard School District already recently constructed Juan Soria and Thurgood Marshall Elementary School. Enough is enough. Stop putting children in harm's way.

Furthermore, how will the placement of an elementary school impact the training exercises coordinated between Point Mugu, Camarillo Airport and Oxnard Airport? Who will be paying for all the infrastructure improvements for the new school? Traffic is already impacted on Gonzales, Patterson, and Victoria during the morning & afternoon hours due to Oxnard High School and Thurgood Marshall Elementary. How are the residents supposed to exit the Summerfield, Lionsgate, and Strawberry Field Tracts onto Doris if you place a school there? Wasn't a fire station originally supposed to be constructed there? Why the sudden change of plan? Where are the children coming from that you plan to bus there if the Teal Club development never commences? The Oxnard School District has plenty of land. Why don't you work on improving existing school campuses and constructing a 2 or 3 story classroom building to accommodate students in the schools that are most impacted if they are overcrowded instead of just sticking more single story trailers there and constructing more single story schools? Clearly if you have enough funding for an entire new campus, you have money to improve existing schools. What do other communities do in other cities to address the problem when they do not have land to acquire to build another school? Why don't you look into some of those for a viable long-term solution instead of short term fixes?

Sincerely,


Susan A. Bonucchi

Summerfield Tract Resident

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Clay Downing, Planning

DATE: June 8, 2017

FROM: Alicia Stratton

SUBJECT: Request for Review of Notice of Preparation for an Environmental Impact Report for the Doris Patterson Educational Facilities Project, Oxnard School District (Reference No. 17-014)

Air Pollution Control District staff has reviewed the subject notice of preparation (NOP) for an environmental impact report (EIR) for the project, which proposes construction and operation of a new elementary and middle school and District administrative center on a 25-acre site. The proposed project would support a district office, 700 elementary school students in grades K-5 and 1,200 middle school students in grades 6-8. The project includes a proposed reorganization that will be comprised of an annexation into the City of Oxnard and the Callegues Municipal Water District and a detachment from the Ventura County Fire Protection District, Ventura County resource Conservation District and Ventura County Service Areas 32 and 33. The project location is the southeast corner of Doris Avenue and North Patterson Road in Oxnard.

Page 3 of the NOP indicates that the project identified may have potential significant impacts related to air quality. The *Air Quality* section of the Initial Study on Page 2-9 also indicates that the project would have potentially significant impacts on air quality. This discussion indicates that an air quality study will be prepared for the project and air quality impacts would be analyzed in the EIR. District staff recommends the EIR evaluate all potential air quality impacts that may result from the project. Specifically, the air quality assessment should consider all reactive organic compounds, nitrogen oxide emissions and particulate matter from all project-related motor vehicles and construction equipment from the project.

Further, we note that the project site is surrounded by agricultural uses to the south, east and west; and located north of the project site is a residential neighborhood. Because the project would be adjacent to agricultural fields, application of fertilizers, herbicides and pesticides are a potential air quality issue that should be also analyzed in the EIR.

This project will involve a large amount of grading of soil (25 acres). The California Air Resources Board (CARB) has identified diesel exhaust particulate matter as a Toxic Air Contaminant (TAC). Diesel exhaust includes hundreds of different gaseous and

particulate components, many of which are toxic. The earthmoving equipment has the potential to expose sensitive populations in the vicinity to elevated levels of diesel exhaust.

The District recommends that a screening health risk assessment be conducted for the project to assess the potential health risks on the nearby sensitive receptors. Mitigation measures should also be identified and discussed if the assessment indicates a significant risk. Additional information on TACs can be obtained from the District's website at http://www.vcapcd.org/air_toxics.htm.

A carbon monoxide screening analysis should be conducted for any project-impacted roadway intersection that are currently operating, or that are expected to operate at, Levels of Service D, E, or F, or at any project-impacted roadway intersection that may be a CO hotspot. If a potential hotspot is identified, the District recommends that a complete CALINE3 or CALINE4 carbon monoxide analysis be conducted for that intersection.

Thank you for the opportunity to review this project. If you have any questions, please call me at (805) 645-1426 or email alicia@vcapcd.org.



Ventura County Transportation Commission

June 8, 2017

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South A Street
Oxnard, CA 93030

RECEIVED

JUN 10 2017

Subject: Doris Patterson Educational Facilities Project

BUSINESS & FISCAL SERVICES

Dear Ms. Cline:

The Ventura County Transportation Commission (VCTC) which also serves as the Ventura County Airport Land Use Commission (ALUC) appreciates the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Doris Patterson Educational Facilities Project. The VCTC and ALUC offers the following comments referenced to Initial Study Sections:

Section 1.3 Other Public Agencies Whose Approval Is Required

The Ventura County Airport Land Use Commission should be listed as a public agency whose approval is required due to the proposed project's location within Airport Study Area for Oxnard Airport as defined in the Airport Comprehensive Airport Plan. The District should submit the proposed project for an ALUC consistency review prior to a General Plan Amendment.

Section 2.4.10 b Land Use Planning

The EIR should consider whether the proposed project is consistent with the adopted Ventura County Airport Comprehensive Airport Plan. The proposed project's location is within Airport Study Area for Oxnard Airport and more specifically within the Traffic Pattern Zone (TPZ) which restricts and/or conditions certain land uses.

2.4.12 Noise

The EIR should consider potential noise impacts on the student population from Oxnard Airport and ensure that proper mitigations are considered inside and outside of classrooms.

2.4.16 b Transportation/Traffic

The EIR should clearly identify the impacts of the traffic generated by school trips from all areas that that the school facilities will draw from. Limiting the traffic study to the immediate area surrounding the facilities is not sufficient to determine the significance of impact due to traffic. A full discussion of mitigation through Traffic Demand Measures (TDMs) should be included in the EIR.

Again, the Ventura County Transportation Commission (VCTC) which also serves as the Ventura County Airport Land Use Commission (ALUC) appreciates the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Doris Patterson Educational Facilities Project. If you have any questions concerning the above comments please feel free to contact me at (805) 642-1591 Ext. 103.

Sincerely,

A handwritten signature in blue ink that reads "Steve DeGeorge". The signature is fluid and cursive, with the first name "Steve" written in a larger, more prominent script than the last name "DeGeorge".

Steve DeGeorge
Director of Planning

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0067
FAX (213) 897-1337
www.dot.ca.gov



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*Serious drought!
Making Conservation
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JUN 14 2017

June 9, 2017

Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030

BUSINESS & FISCAL SERVICES

RE: Doris Ave Educational Facilities
Vic: VEN-1 / PM: 18.874
GTS# 07-VEN-2017-00067
SCH# 2017051041

Dear Ms. Cline,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project consists of constructing joint-use facilities to support a district office, 700 elementary school students and 1,200 middle school students. In total, the proposed project would comprise approximately 148,782 sf of building and provide 220 on-site car parking spaces.

After reviewing the Notice of Preparation (NOP), Caltrans has the following comments:

State-level policy goals related to sustainable transportation seek to reduce the number of trips made by driving, reduce greenhouse gas emissions, and encourage alternative modes of travel. Caltrans' Strategic Management Plan has set targets of tripling trips made by bicycling and doubling trips made by walking and public transit by 2020. The Strategic Plan also seeks to achieve a 15% reduction in statewide per capita vehicle miles traveled by 2020. Similar ambitious goals are embedded in Caltrans' 2040 Transportation Plan, and Southern California Association of Governments' Regional Transportation Plan. Statewide legislation such as AB 32 and SB 375, as well as Executive Orders S-3-05 and B-16-12, echo the need to pursue more sustainable development. Such climate change goals can only be achieved through support from local partners.

In light of state legislation SB 743, the lead agency may choose to proceed with a vehicle miles traveled (VMT) transportation analysis instead of a more traditional level of service (LOS) analysis for the traffic study. However, irrespective of methodology used, any transportation-related impacts should be addressed through appropriate multi-modal mitigation measures to reduce the number of vehicle trips generated by the project. Measures could include: installing safe and secure bicycle parking/storage for students and visitors; reducing the amount of parking associated with the project; and/or providing incentives for employees to carpool or take alternative means of transportation. Measures that promote alternatives to car use are especially opportune as the school serves children- a portion of the population physically and legally unable to drive independently.

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Ms. Lisa Cline
June 9, 2016
Page 2

Note existing research on parking suggests that providing free and plentiful car parking encourages and enables *more* driving while increasing development costs. Please acknowledge the role parking plays in generating car use, and consider alternative measures to promote carpooling, active transportation and public transit.

According to the NOP, there may be significant impacts related to air quality, greenhouse gas emissions, and transportation. Although these elements are analyzed separately they are interrelated. The mode of transportation people use to access the site can directly impact air quality and affect greenhouse gas emissions produced in relation to the site. While it may be determined that there is no significant impact in any of these categories, efforts can and should be made to encourage alternatives to driving such as carpooling, bicycling, walking, and bus/shuttle use.

Absent from the NOP is any mention of bicycle parking. With nearly 2,000 students accommodated - in addition to faculty and staff - it is likely a portion of the facility's population will bicycle to school out of necessity or individual choice. As such, strong consideration should be given to providing safe, pleasant, and convenient on-site bicycle parking and other amenities such as skateboard or scooter parking. The presence of high-quality bicycle parking can encourage bicycle use. Conversely, an absence of high-quality and secure bicycle parking can *discourage* bicycle use. Although the project site is in unincorporated Ventura County, the site is within the City of Oxnard's Sphere of Influence. Oxnard has off-street bicycle parking requirements per City Code Section 16-616, which states "off-street bicycle parking facilities shall be provided for any new building constructed..." Caltrans would like to see a discussion of bicycle parking and other efforts to reduce vehicle trips generated in relation to the project.

Be aware any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods. Also, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. The project needs to be designed to discharge clean run-off water.

If you have questions regarding these comments, please contact project coordinator Severin Martinez at (213)-897-0067 or severin.martinez@dot.ca.gov and refer to GTS# 07-VEN-2017-00067.

Sincerely,



DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse



VENTURA LOCAL AGENCY FORMATION COMMISSION

COUNTY GOVERNMENT CENTER • HALL OF ADMINISTRATION

800 S. VICTORIA AVENUE • VENTURA, CA 93009-1850

TEL (805) 654-2576 • FAX (805) 477-7101

WWW.VENTURA.LAFCO.CA.GOV

June 9, 2017

SENT VIA E-MAIL

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Oxnard School District's Doris/Patterson Educational Facilities Project

Dear Ms. Cline:

Thank you for providing the Ventura Local Agency Formation Commission (LAFCo) with the opportunity to review the NOP for Doris/Patterson Educational Facilities Project Draft EIR. As a responsible agency under the California Environmental Quality Act (CEQA), LAFCo is charged with ensuring that environmental documents prepared by lead agencies address the issues that relate to LAFCo's scope of authority. Please note that the Commission has not reviewed the NOP, and these comments are solely those of the LAFCo staff.

LAFCo's purposes are to (1) discourage urban sprawl, (2) preserve open space and prime agricultural land, (3) ensure efficient provision of government services, and (4) encourage the orderly formation and development of local agencies, such as cities (Government Code § 56301). The Ventura LAFCo has adopted local policies that it must consider when making decisions on reorganization proposals. Specifically, the policies found in Divisions 3 and 4 of the Handbook apply to the proposed project.

Project Description

The Oxnard School District (OSD) is the lead agency for the subject project. If approved, the project would involve the construction and operation of: (1) an elementary school (accommodating 700 students), (2) a middle school (accommodating 1,200 students), and (3) a district administrative center. The development would be located on a 25-acre site at the southeast corner of Doris Avenue and Patterson Road, immediately south of the City of Oxnard's existing boundaries. The facility would include classrooms, offices, and various other buildings in support of the two schools, as well as internal driveways, parking lots, and several play fields.

It appears that implementation of the project would result in improvements and widening of the Patterson Road right-of-way (immediately west of the proposed facility), so that the right-of-way aligns with the existing Patterson Road right-of-way north of Doris Avenue. This would involve acquisition of a portion of the neighboring property to the west. The project description should

therefore include this area. Additionally, the request should contain an amendment to the City's sphere of influence (to include this area in the City's sphere) and an amendment to the Ventura-Oxnard Greenbelt Agreement (to exclude this area from the Greenbelt), as discussed below.

The project site has historically been used for crop production. It has a County General Plan land use designation of *Agricultural – Urban Reserve* and a zoning designation of *Agricultural Exclusive (40 acre minimum parcel size)*. The project area contains City General Plan designations of *Park, Public/Semi Public, and Open Space*. The territory immediately west of the proposed facility that involves road widening to accommodate the project is designated by the City's General Plan as *Agriculture*. The project description states that the OSD is proposing a General Plan Amendment and pre-zoning, but should also specify the proposed land use designation(s) and pre-zoning designation(s). The project should be evaluated for consistency with the existing City General Plan land use designation(s) (if applicable) and include a discussion of the proposed amendment to the City General Plan land use designation(s) for the entire proposal area.

The City is currently processing a request for the approval of the Teal Club Specific Plan, which includes the proposal area. Under the Specific Plan, the subject area would be used as a public facility, however the specific use has not been identified. Staff recommends that the OSD collaborate with the City so that the subject project can be integrated into the Specific Plan (in case the Specific Plan project is adopted), and to establish whether the City would be amenable to extending municipal services to project site if it is developed independently of the Specific Plan.

Request to LAFCo

Reorganization:

In order for the project site to be developed as proposed, the project area must be annexed to the City. The City would provide municipal services to the proposal area once the territory is annexed. Annexation of the proposal area to the City requires LAFCo approval of several changes of organization, collectively called a reorganization. The project description should include the following LAFCo actions that would be necessary components of the reorganization:

- Annexation to the City of Oxnard
- Annexation to the Calleguas Municipal Water District
- Detachment from Oxnard Drainage District No. 1
- Detachment from the Ventura County Resource Conservation District
- Detachment from the Ventura County Fire Protection District
- Detachment from Ventura County Service Area No. 32
- Detachment from Ventura County Service Area No. 33

Inclusion of Patterson Road Right-of-Way:

Based on the site plan that was provided in the Initial Study, the proposal area excludes the adjoining segment of the Patterson Road right-of-way. Section 3.2.1 of the Ventura LAFCo

Commissioner's Handbook (Handbook)¹ provides, in part that, "Except in extraordinary circumstances, cities shall annex entire roadway sections adjacent to territory proposed to be annexed and shall include complete intersections." In addition, the site plan indicates road widening of Patterson Road that would extend off-site and westward into neighboring agricultural property. Therefore, the project description should be revised to include the adjoining portion of the Patterson Road right-of-way, and any additional territory necessary for improvements, as part of the proposed reorganization.

Sphere of Influence Amendments:

Implementation of the project would require the following sphere of influence amendments:

- Amendment of the City of Oxnard's sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west
- Amendment of the Calleguas Municipal Water District sphere of influence to include the adjoining segment of Patterson Road and agricultural land to the west
- Amendment of the Oxnard Drainage District No. 1 sphere of influence to remove the adjoining segment of Patterson Road and agricultural land to the west
- Amendment of the Ventura County Service Area No. 33 sphere of influence to remove the entire proposal area

Note that LAFCo has policies related to sphere of influence amendments involving schools (Handbook Section 4.3.3), which should be considered by the OSD as it evaluates project feasibility.

City Urban Restriction Boundary (CURB):

It appears that territory to the west of the proposed school site will be used for widening of Patterson Road. This area is outside the City's CURB. Voter approval is typically required for the extension of City services outside the City's CURB. Ventura LAFCo has adopted policies that proposed reorganizations and sphere of influence amendments should be consistent with voter-approved growth boundaries (Ventura LAFCo Commissioner's Handbook Sections 3.2.4.2 and 4.2.1). Therefore, the analysis of the project should include a discussion of consistency with the City's ordinance requiring voter approval for extension of City services outside the CURB.

Ventura-Oxnard Greenbelt:

It appears that territory to the west of the proposed school site will be used for widening of Patterson Road. This area is within the Ventura-Oxnard Greenbelt. The purpose of greenbelts is to preserve agriculture and/or open space, provide separation between cities, and/or limit the extension of urban services. LAFCo policies generally provide that, unless exceptional circumstances exist, LAFCo will not approve proposals that are in conflict with greenbelt agreements (Handbook Section 3.2.4.4). Therefore, the project description should include a

¹ The Handbook is available on the Ventura LAFCo website at www.ventura.lafco.ca.gov, and can be found by clicking on the "Policies" tab.

proposed amendment to the Ventura-Oxnard Greenbelt Agreement to exclude this area (amendments to a greenbelt agreement require approval from all parties to the agreement).

Parcel Boundary:

The proposal area is a portion of a larger agricultural parcel. Additionally, as discussed above, it appears that a portion of the neighboring parcel directly west of the project site will be needed for road widening of Patterson Road. Ventura LAFCo has adopted a policy requiring that proposals conform to lines of ownership or assessment, and that they involve only legal lots (Handbook Sections 3.1.4.2 and 3.1.4.3). The project description should include an explanation of the how the proposal area will consist of a legal lot.

LAFCo as a Responsible Agency under CEQA:

Pursuant to the information above and consistent with information in the NOP prepared for the project, the EIR should identify LAFCo as a responsible agency whose approval is required in conjunction with the development of the project.

LAFCo Law and Additional Ventura LAFCo Policies

Based on information provided in the NOP, several topics have been identified for study in the EIR. In addition to those topics already identified by the OSD for further evaluation, the EIR should include an analysis of the following in order to adequately address the subjects that are within LAFCo's scope of authority (pursuant to Government Code § 56668):

Agricultural Resources

The NOP states that the EIR will include an evaluation of the proposed development on agricultural land and agricultural resources. In evaluating impacts to agricultural resources, LAFCo must apply the definition of prime agricultural land found in LAFCo law (Government Code § 56064), which includes standards relating to the value of agricultural products and the soils classification determined by the Natural Resources Conservation Service. The analysis should specifically address potential impacts pursuant to the LAFCo definition of prime agricultural land, so that the information may be used at such time as LAFCo takes action on the proposal.

Additionally, please note that Handbook Section 1.4.3.1(d) states that: "For projects that would result in the conversion of prime agricultural land to non-agricultural uses, the environmental document should consider mitigation measures to address the potential loss of the agricultural land, as provided for under Government Code Section 65965 et al." To assist the OSD in complying with this policy, LAFCo has prepared *Ventura LAFCo Informational Guidelines for the Consideration of Agricultural Mitigation Measures*, which includes examples of mitigation measures and related implementation factors for consideration by lead agencies as they prepare environmental documents (see attachment).

Furthermore, the evaluation of impacts to agricultural land should include an analysis pursuant to Handbook Section 3.3.5, which states that in order to approve a proposal that would likely result in the conversion of prime agricultural land, the Commission must find that the proposal will lead to planned, orderly, and efficient development.

Airport Hazards

The proposed development includes the construction of an elementary school and a middle school. The project area is located within the Traffic Pattern Zone (TPZ) of the Oxnard Airport, as documented in the *Airport Comprehensive Land Use Plan Update for Ventura County (CLUP)* (July 7, 2000). According to Table 6B of the CLUP, and as noted in the DEIR, schools are identified as being an unacceptable use within the TPZ. Pursuant to Handbook Section 3.3.1.2(b), LAFCo does not favor approval of proposals that are inconsistent with applicable plans adopted by any governmental agency. The EIR should include an evaluation of consistency with the CLUP.

Additional Comments

The Ventura LAFCo encourages prospective applicants to meet with LAFCo staff early in the planning process (see the attached letter from the Commission). We find that such consultation and ongoing communication is helpful to clarify the nuances of LAFCo requirements and to avoid delays later in the process.

LAFCo staff requests to be notified when the Draft EIR is available for review, and will provide further comments at that time, if necessary.

Please contact me if you have any questions.

Sincerely,



Andrea Ozdy
Analyst

Attachments

- c: Kathleen Mallory, City of Oxnard
- Todd McNamee, Ventura County Department of Airports
- Kim Prillhart, Ventura County Planning Division



VENTURA LOCAL AGENCY FORMATION COMMISSION

COUNTY GOVERNMENT CENTER ■ HALL OF ADMINISTRATION

800 S. VICTORIA AVENUE ■ VENTURA, CA 93009-1850

TEL (805) 654-2576 ■ FAX (805) 477-7101

WWW.VENTURA.LAFCO.CA.GOV

Ventura LAFCo Informational Guidelines for the Consideration of Agricultural Mitigation Measures¹

The Ventura Local Agency Formation Commission has adopted policies encouraging lead agencies to consider agricultural mitigation measures in their environmental documents for projects that are likely to lead to the conversion of prime agricultural land. Section 1.4.3.1.d of the Commission's Administrative Supplement to the California Environmental Quality Act (found in Division 1 Chapter 4 of the Ventura LAFCo Commissioner's Handbook²) provides, in part:

For projects that would result in the conversion of prime agricultural land to non-agricultural uses, the environmental document should consider mitigation measures to address the potential loss of the agricultural land, as provided for under Government Code Section 65965 et.al.

Examples of mitigation measures that could be considered, at the discretion of the lead agency, if feasible, are:

- Agricultural conservation easements
- Agricultural land mitigation bank and credits
- Fee title (ownership)
- Fees in lieu of agricultural conservation easements, agricultural land mitigation bank and credits, or fee title

When considering such mitigation measures, lead agencies should consider related implementation factors, including, but not necessarily limited to, the following:

- Permanent preservation of other prime agricultural land (such as in a 1:1 ratio, or greater, to that proposed to be converted)
- Preservation of land of a similar soil quality and/or classification as that proposed to be converted
- Preservation of land that possesses the related resources (water, drainage, etc.) to ensure that on-going agricultural production would be viable
- Preservation of land located within Ventura County (but not necessarily within the lead agency's sphere of influence).

¹ These informational guidelines were approved by the Ventura LAFCo on May 17, 2017

² Available on the Ventura LAFCo website at <http://www.ventura.lafco.ca.gov/wp-content/uploads/Ventura-LAFCo-Commissioners-Handbook-Revised-4.20.2016.pdf>



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Dear Prospective LAFCo Applicant:

Local Agency Formation Commissions (LAFCos) are independent governmental agencies responsible for promoting orderly development through the logical formation and determination of local agency boundaries. LAFCos implement the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000 et seq.), which grants them broad authority to review, consider, modify, condition, and approve or disapprove requests for changes of organization, including annexations.

In reviewing any request for a change of organization, LAFCos must consider numerous factors such as, but not limited to, land use; the need for organized community services; the effect on the cost and adequacy of services in the area and adjacent areas; the ability of the city or district to provide services; the availability of water supplies; consistency with regional transportation plans and city/county general and specific plans; and the effects on agricultural lands. In addition, LAFCos must comply with laws pertaining to environmental protection, land conservation, public records, open meetings and taxation. The Ventura LAFCo has also adopted local policies which must be given great weight as part of its consideration of proposals. These policies, along with LAFCo's operational rules and regulations, are set forth in the *Commissioner's Handbook*, which is available on the LAFCo website: www.ventura.lafco.ca.gov.

Regardless of your agency's level of familiarity or experience with the LAFCo application process, we strongly encourage all prospective applicants to consult with Ventura LAFCo staff prior to submitting an application. Although the LAFCo application requirements are generally the same for each boundary change proposal, there may be exceptions depending on the complexity, scope, and location. During the pre-application consultation, a detailed explanation of the application requirements and all information necessary to process the request will be provided. Meeting all of the requirements in the initial application submittal is the best way to minimize processing time and costs. Generally speaking, it takes between three and four months from the time an application is submitted to the time it can be recorded (for proposals that are approved). However, it can take significantly longer if the application does not include all of the required information.

Pre-application consultations are available free of charge in most cases unless multiple meetings are required. Optimally, the consultation process should occur before your agency initiates the environmental review process and well before a resolution to initiate a change of organization is adopted. Please take advantage of the LAFCo staff to help make your LAFCo experience as efficient and cost effective as possible.

Sincerely,
Ventura Local Agency Formation Commission

June 16, 2017

Lisa Cline
Deputy Superintendent, Business and Financial Services
Oxnard School District
1051 South A Street
Oxnard, CA 93030

RECEIVED

JUN 19 2017

BUSINESS & FISCAL SERVICES

RE: Campus Build Doris & Patterson

Dear Ms. Cline,

I understand there is interest from the Oxnard Union School District to build a new campus, best case scenario, housing both an elementary and middle school on the Doris/Patterson property..

I am in protest of this build. Aside from an inadequate infrastructure to handle the additional traffic concerns and the close proximity to the airport, which was cause for the relocation of the high school, I feel our monies would be better spent on improving our existing schools. The average statewide rating of our Middle and Elementary Schools in Oxnard is a 3 out of 10. Just pitiful. Statewide average class size is 21/22 and our classroom size is on average.

Why can't we hire/add more teachers and faculty to existing schools to lower the classroom size and develop more one on one teaching efforts. Just because we will have a new bright and shiny building does not mean better education. Take the newest of elementary schools, Juan Lagunas Solia, with a rating of 4, which is better than the district's average, but not anything to boast about.

I just cannot understand why this city feels everything becomes better with new developments. I see no value in building a new school that will rank/function as low as our existing. Better we start figuring out the problems in our existing schools, rather than build new and perpetrate our bad teaching skills upon it.

Respectfully,



Carol Dreager
2701 Pyrite Pl
Oxnard, CA 93030

THOMAS L. SLOSSON, PRESIDENT
DIVISION 1

ANDY WATERS, SECRETARY
DIVISION 3

STEVE BLOIS, DIRECTOR
DIVISION 5



ANDRES SANTAMARIA, VICE PRESIDENT
DIVISION 4

SCOTT H. QUADY, TREASURER
DIVISION 2

SUSAN B. MULLIGAN
GENERAL MANAGER

web site: www.calleguas.com

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730 *R. Longman*

RECEIVED

May 12, 2017

Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South A Street
Oxnard, CA 93030

MAY 17 2017

BUSINESS & FISCAL SERVICES

RE: NOTICE OF PREPARATION OF AN EIR DORIS AVENUE/PATTERSON ROAD
EDUCATIONAL FACILITIES PROJECT

Dear Ms. Cline,

Thank you for sending Calleguas Municipal Water District the Notice of Preparation (NOP) and Initial Study for the Doris Avenue/Patterson Road Educational Facilities Project. As you are probably aware I met with Dr. Morales, Greg Norman and Yuri Calderon last year to discuss annexation of the property to Calleguas.

It was good to see that the NOP mentioned annexation to Calleguas. Since Calleguas is a member of Metropolitan Water District of Southern California, the annexation will also be to Metropolitan's service area. Typically annexations to Calleguas and Metropolitan rely on the California Environmental Quality Act (CEQA) document prepared by the lead agency. This letter anticipates the annexation by providing recommended text to include in the EIR. If language similar to the following paragraphs is included in the EIR no addendum or independent CEQA work will be necessary for the annexation.

Land on which the proposed projects will be built is not presently within the boundaries of Calleguas Municipal Water District or Metropolitan Water District of Southern California. The Administrative Codes of both agencies state that water delivered by their systems may be used only within their respective service area boundaries. Calleguas purchases all of its potable water from Metropolitan. Metropolitan supplies water from the Colorado River and the State Water Project for municipal, industrial and agricultural uses within its service area. Annexation to Calleguas and Metropolitan of the land under consideration is necessary to allow annexation to and water service by the City of Oxnard.

Annexation procedures for Metropolitan are defined in Section 3500 of the Metropolitan Water District Act, which are also observed by Calleguas. In addition, annexations to Calleguas are subject to Part 8 of Calleguas' Administrative Code. Annexation is also subject to approval by the Ventura Local Agency Formation Commission and any terms and conditions the Commission may apply. Pursuant to Section 56017 of Part 1, Chapter 2, of the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, annexation means the annexation, inclusion, attachment, or addition of territory to a city or district. This action will require amendment of the Spheres of Influence of Calleguas and Metropolitan.

Calleguas and Metropolitan have in place Water Standby Charges. In the course of annexation, such charges will be fixed for the subject property. Water Standby Charges are assessed to pay for the benefits that properties receive from the projects and facilities provided by Calleguas and Metropolitan, whether or not they receive water from Calleguas and Metropolitan.

This administrative change in water service areas will have a less than significant impact.

Thank you for your attention to this detail. If any questions or concerns come to mind, you are welcome to call me at 805-579-7129.

Sincerely,

A handwritten signature in blue ink that reads "Cy Johnson". The signature is written in a cursive, flowing style.

Cy Johnson
Development Programs Administrator

cc: Eric Bergh, Manager of Resources, CMWD



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

Notice of Preparation

May 16, 2017

To: Reviewing Agencies

Re: Doris Avenue/Patterson Road Educational Facilities Project
SCH# 2017051041

Attached for your review and comment is the Notice of Preparation (NOP) for the Doris Avenue/Patterson Road Educational Facilities Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017051041
Project Title Doris Avenue/Patterson Road Educational Facilities Project
Lead Agency Oxnard School District

Type NOP Notice of Preparation
Description The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. The project site is located within unincorporated Ventura County and within the city of Oxnard SOI area. The project will include a proposed reorganization which will be comprised of an annexation into the city of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. The District will process a GPA, PZ and an Annexation through the city.

Lead Agency Contact

Name Lisa Cline
Agency Oxnard School District
Phone 805-385-1501 **Fax**
email
Address 1051 South A Street
City Oxnard **State** CA **Zip** 93030

Project Location

County Ventura
City Oxnard
Region
Cross Streets Southeast corner of Doris Ave and North Patterson Rd
Lat / Long 34° 12' 29.2" N / 119° 12' 27.0" W
Parcel No. 183-0-070-090
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 1, 232
Airports Oxnard
Railways UPRR
Waterways Santa Clara River
Schools mult
Land Use Present: ag/Ventura GP: AG-urban reserve; Oxnard GP: public/semi-public, open space and park

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Fish and Wildlife, Region 5; Department of General Services; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; State Water Resources Control Board, Division of Drinking Water; Department of Toxic Substances Control; Other Agency(ies)

Date Received 05/11/2017 **Start of Review** 05/11/2017 **End of Review** 06/09/2017

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710
Fax (916) 373-5471
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



RECEIVED

K. Crosby

R. Longman

MAY 22 2017

May 17, 2017

Lisa Cline
Oxnard School District
1055 South A Street
Oxnard, CA 93030

BUSINESS & FISCAL SERVICES

RE: SCH#2017051041 Doris Avenue/Patterson Road Educational Facilities Project, Ventura County

Dear Ms. Cline:

The Native American Heritage Commission has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subs. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).
7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
- a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions, please contact me at my email address: frank.lienert@nahc.ca.gov

Sincerely,



for Frank Lienert
Associate Governmental Program Analyst

cc: State Clearinghouse

cc: K. Crosby
P. Rafael
RECEIVED R. Longman

Ms. Romero
1710 Zircon Avenue
Oxnard, CA 93030

MAY 25 2017

May 22, 2017

BUSINESS & FISCAL SERVICES

Ms. Lisa Cline, Deputy Superintendent
Business and Facilities Service, Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

Subj: ENVIRONMENTAL IMPACT REPORT NOTICE COMMENT PERIOD, CAMPUS AT DORIS AVE
AND N. PATTERSON RD

The Doris/Patterson location is obviously putting additional people near a hazard; the Oxnard Airport. Have we learned nothing since 1997's airplane crash? Thankfully the people aboard the Cessna had a lima bean field to crash land into instead of a school. I would encourage you to seriously consider this point regardless of the preponderance of airplane emergencies.

The Doris/Patterson location is obviously putting people near another hazard; the toxic saturated fields of N. Patterson Road. Have we learned nothing from the El Rio School District and the Oxnard Union High School District?

All the while creating a new hazard; un-mitigatable traffic. Any school, business, or homes placed at this location would have to exit in an easterly or westerly direction first to reach N. Ventura Road or N. Victoria Avenue respectively since the existing airport blocks the south exit. In addition, N. Patterson Rd. extending north is NOT a road intended for moving a large volume of traffic. Just stop by when the Oxnard High School morning or afternoon traffic is flowing. In contrast to your Juan Lagunas Soria Elementary School which does not have a high school comprising over 3,000 students and staff arriving and exiting daily on the same roads. The Cabrillo neighborhood needed a traffic signal installed at Gallatin Place/ W. Gonzales Rd. so residents could exit each morning. Will you be blocking Cabrillo's exit to the south as well? Currently, within a span of 1.7 miles along Gonzales (N. Patterson Rd. to Oxnard Blvd.) there are eight (8) traffic signals. You would be doing the same to Doris Avenue; please don't!

N. Patterson Road (between Teal Club Road and Doris Avenue) is a recurrent dumping ground for mattresses and assorted trash. Will this be the welcome you give your staff and families?

Doris Avenue and N. Patterson Rd is a lousy location to build a school for any one of the reasons above but certainly for all combined. And I agree with Paul Giacobbe, "...what makes north Oxnard unique, and gives our area its character, are the residential developments interspersed with farmland. I hope this is not lost."

Sincerely,



Ms. Romero



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

cc: K. Crosby
R. Longman



Ken Alex
Director

RECEIVED

MAY 30 2017

BUSINESS & FISCAL SERVICES

Memorandum

Date: May 23, 2017
To: All Reviewing Agencies
From: Scott Morgan, Director
Re: SCH # 2017051041
Doris Avenue/Patterson Road Educational Facilities Project

On **May 23, 2017**, the State Clearinghouse submitted the above **Notice of Preparation** to your agency with an incorrect address.

The correct address is:

Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030

We apologize for this error and request that you note the above information for your files. All other project information remains the same.

cc: Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

Notice of Preparation

May 23, 2017

To: Reviewing Agencies

Re: Doris Avenue/Patterson Road Educational Facilities Project
SCH# 2017051041

Attached for your review and comment is the Notice of Preparation (NOP) for the Doris Avenue/Patterson Road Educational Facilities Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments

cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017051041
Project Title Doris Avenue/Patterson Road Educational Facilities Project
Lead Agency Oxnard School District

Type NOP Notice of Preparation
Description The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. The project site is located within unincorporated Ventura County and within the city of Oxnard SOI area. The project will include a proposed reorganization which will be comprised of an annexation into the city of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. The District will process a GPA, PZ and an Annexation through the city.

Lead Agency Contact

Name Lisa Cline
Agency Oxnard School District
Phone 805-385-1501 **Fax**
email
Address 1051 South A Street
City Oxnard **State** CA **Zip** 93030

Project Location

County Ventura
City Oxnard
Region
Cross Streets Southeast corner of Doris Ave and North Patterson Rd
Lat / Long 34° 12' 29.2" N / 119° 12' 27.0" W
Parcel No. 183-0-070-090
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 1, 232
Airports Oxnard
Railways UPRR
Waterways Santa Clara River
Schools mult
Land Use Present: ag/Ventura GP: AG-urban reserve; Oxnard GP: public/semi-public, open space and park

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Fish and Wildlife, Region 5; Department of General Services; Native American Heritage Commission; Public Utilities Commission; State Lands Commission; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; State Water Resources Control Board, Division of Drinking Water; Department of Toxic Substances Control; Other Agency(ies)

Date Received 05/11/2017 **Start of Review** 05/11/2017 **End of Review** 06/09/2017

NOP Distribution List

County: *Ventura*

SCH#

2017051041

<input checked="" type="checkbox"/> <u>Resources Agency</u> Resources Agency Nadell Gayou	<input type="checkbox"/> Fish & Wildlife Region 4 Julie Vance	<input type="checkbox"/> Native American Heritage Comm. Debbie Treadway	<input type="checkbox"/> Regional Water Quality Control Board (RWQCB)
<input type="checkbox"/> Dept. of Boating & Waterways Denise Peterson	<input checked="" type="checkbox"/> Fish & Wildlife Region 5 Leslie Newton-Reed Habitat Conservation Program	<input type="checkbox"/> Public Utilities Commission Supervisor	<input type="checkbox"/> RWQCB 1 Cathleen Hudson North Coast Region (1)
<input type="checkbox"/> California Coastal Commission Elizabeth A. Fuchs	<input type="checkbox"/> Fish & Wildlife Region 6 Tiffany Ellis Habitat Conservation Program	<input type="checkbox"/> Santa Monica Bay Restoration Guangyu Wang	<input type="checkbox"/> RWQCB 2 Environmental Document Coordinator San Francisco Bay Region (2)
<input type="checkbox"/> Colorado River Board Lisa Johansen	<input type="checkbox"/> Fish & Wildlife Region 6 /MM Heidi Calvert Inyo/Mono, Habitat Conservation Program	<input type="checkbox"/> State Lands Commission Jennifer Deleong	<input type="checkbox"/> RWQCB 3 Central Coast Region (3)
<input type="checkbox"/> Dept. of Conservation Crina Chan	<input type="checkbox"/> Dept. of Fish & Wildlife M William Paznokas Marine Region	<input type="checkbox"/> Tahoe Regional Planning Agency (TRPA) Cherry Jacques	<input checked="" type="checkbox"/> RWQCB 4 Teresa Rodgers Los Angeles Region (4)
<input type="checkbox"/> Cal Fire Dan Foster	<input type="checkbox"/> Other Departments	<input type="checkbox"/> Cal State Transportation Agency CalSTA	<input type="checkbox"/> RWQCB 5 Central Valley Region (5)
<input type="checkbox"/> Central Valley Flood Protection Board James Herola	<input checked="" type="checkbox"/> California Department of Education Lesley Taylor	<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> RWQCB 5F Central Valley Region (5) Fresno Branch Office
<input checked="" type="checkbox"/> Office of Historic Preservation Ron Parsons	<input type="checkbox"/> OES (Office of Emergency Services) Monique Wilber	<input type="checkbox"/> Airport & Freight Jack Wursten	<input type="checkbox"/> RWQCB 5R Central Valley Region (5) Redding Branch Office
<input type="checkbox"/> Dept of Parks & Recreation Environmental Stewardship Section	<input type="checkbox"/> Food & Agriculture Sandra Schubert Dept. of Food and Agriculture	<input type="checkbox"/> Transportation Projects Nesamani Kalandiyur	<input type="checkbox"/> RWQCB 6 Lahontan Region (6)
<input type="checkbox"/> S.F. Bay Conservation & Dev't. Comm. Steve Goldbeck	<input type="checkbox"/> Dept. of General Services Cathy Buck Environmental Services Section	<input type="checkbox"/> Industrial/Energy Projects Mike Tollstrup	<input type="checkbox"/> RWQCB 6V Lahontan Region (6) Victorville Branch Office
<input type="checkbox"/> Dept. of Water Resources Agency Nadell Gayou	<input type="checkbox"/> Housing & Comm. Dev. CEQA Coordinator Housing Policy Division	<input type="checkbox"/> California Department of Resources, Recycling & Recovery Sue O'Leary	<input type="checkbox"/> RWQCB 7 Colorado River Basin Region (7)
<input type="checkbox"/> Fish and Game	<input type="checkbox"/> Independent Commissions, Boards	<input type="checkbox"/> State Water Resources Control Board Regional Programs Unit Division of Financial Assistance	<input type="checkbox"/> RWQCB 8 Santa Ana Region (8)
<input type="checkbox"/> Dept. of Fish & Wildlife Scott Flint Environmental Services Division	<input type="checkbox"/> Delta Protection Commission Erik Vink	<input type="checkbox"/> State Water Resources Control Board Cindy Forbes - Asst Deputy Division of Drinking Water	<input type="checkbox"/> RWQCB 9 San Diego Region (9)
<input type="checkbox"/> Fish & Wildlife Region 1 Curt Babcock	<input type="checkbox"/> Delta Stewardship Council Kevan Samsam	<input type="checkbox"/> State Water Resources Control Board Div. Drinking Water # _____	<input type="checkbox"/> Other _____
<input type="checkbox"/> Fish & Wildlife Region 1E Laurie Harnsberger	<input type="checkbox"/> California Energy Commission Eric Knight	<input type="checkbox"/> State Water Resources Control Board Student Intern, 401 Water Quality Certification Unit Division of Water Quality	
<input type="checkbox"/> Fish & Wildlife Region 2 Jeff Drongesen	<input type="checkbox"/> California Energy Commission Eric Knight	<input type="checkbox"/> State Water Resources Control Board Phil Crader Division of Water Rights	
<input type="checkbox"/> Fish & Wildlife Region 3 Craig Weightman		<input type="checkbox"/> Dept. of Toxic Substances Control CEQA Tracking Center	<input type="checkbox"/> Conservancy
		<input type="checkbox"/> Department of Pesticide Regulation CEQA Coordinator	

RECEIVED

cc: K. Crosby
P. Raphael
R. Longman

Paul Giacobbe
1200 Yukonite Place
Oxnard, CA 93030
20 May 2017

MAY 25 2017

BUSINESS & FISCAL SERVICES

Ms. Lisa Cline, Deputy Superintendent
Business and Facilities Service, Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

Subj: ENVIRONMENTAL IMPACT REPORT NOTICE COMMENT PERIOD, CAMPUS AT
DORIS AVE AND PATTERSON RD

Encl: (1) LA Times Article of 23 August 1997 – Plane Crash At Field Near Oxnard Airport

The Oxnard School District proposes that a campus be built at Doris Ave and Patterson Rd in Oxnard, CA. This location is within a mile of the Oxnard Airport.

In August of 1997 there was a plane crash in this area. A plane sheared off the chimney of a house on Ivanhoe Ave. It then slammed into a cement light pole on Doris Ave ripping off a wing. The wing landed on the street bursting into flames. The plane crashed into the field across the street; the proposed site of the school project. See enclosure (1).

An article appeared in the Ventura County Star on 2 September 2015. Edwards Air Force Base conducted test flights, with F-35 fighter jets, at the Oxnard Airport. Military jets have crashed and destroyed homes in the San Diego area in the recent past.

Doris Ave and Patterson Rd is a potentially dangerous place to build a school.

In addition, what makes north Oxnard unique, and gives our area its character, are the residential developments interspersed with farmland. I hope this is not lost.

Yours truly,



Paul Giacobbe

2 Men Seriously Hurt When Plane Crashes Into Field

Aviation: A third man receives minor injuries after the single-prop Cessna, on an instructional flight, fails to make an emergency landing at Oxnard Airport.

August 23, 1997 DAWN HOBBS and SCOTT HADLY | SPECIAL TO THE TIMES

OXNARD — Two men suffered lacerations and broken bones when their single-propeller Cessna clipped a house and crashed into a lima bean field Friday afternoon as they attempted an emergency landing at the Oxnard Airport.

A third man suffered minor injuries.

"We were talking in the living room and playing Nintendo, then we heard this big boom and the house shook like a big earthquake," said Julie Plascencia, 14, who was in the two-story beige home. "I was too scared to think about what it was."

The plane, on an instructional flight out of Camarillo Airport, apparently suffered engine failure before it sheared off the top of a chimney and some red roof tiles on the house on Ivanhoe Avenue about 2:30 p.m.

The Cessna 210 then slammed into a cement light pole across the street on Doris Avenue, ripping off a wing and crashing into the bean field just steps away from farm workers. The wing left behind in the street burst into flames and unleashed a black column of smoke.

Shirley Clark was watering plants in her backyard on Nottingham Drive when she spotted the plane gliding suspiciously quiet--just above rooftop level.

"I did not hear a motor but the prop was turning," Clark said.

Then she saw fear on the pilot's face.

"The expression on the man was frightening," she said. "Obviously he had lost power. I give the man credit for trying to get the plane into an open field."

By the time Oxnard firefighters arrived, one of the men was standing next to the wreckage, said Fire Department Battalion Chief Terry McAnally. The man seemed to have escaped serious injury.

Two other men were trapped beneath the plane. One was lying under the wing, and firefighters were able to pull him out. The other was pinned under the left side, paramedics and firefighters said. Both suffered broken ankles and serious lacerations.

All three were taken to St. John's Regional Medical Center.

"Everybody is conscious. Everybody is talking," said Lynn Borman, a paramedic supervisor with Gold Coast Ambulance Company.

Hospital officials identified the men as 34-year-old Michael Macias, a certified flight instructor with Sun-Air Aviation Inc. in Camarillo, and Beat Leu, 33, and Markus Vogel, 41, both of Switzerland. All three were listed in fair condition, a hospital spokeswoman said.

"It was a clear day. It's hard to say what happened," McAnally said. "There was no report of any landing gear down. They hit the roof, the pole and then tore off the wing. They're lucky they got away from it . . . if lucky is the word."

Tad Dougherty, manager of the Oxnard Airport, said the pilot tried at the last minute to avoid the homes.

"He probably saved somebody," Dougherty said. "An experienced pilot will do everything he can to land the plane in a vacant field. He doesn't want to hit the house because he will injure himself as well as anybody in the house."

Residents in the nearby housing tract said that although they live near the Oxnard Airport they had never feared crashes before.

"When we first came to look at the house we questioned the developer here about the planes," said Gail Johnson, who lives across the street from the home clipped by the plane. "We were told we were not in a flight path."

Crash investigators with the Federal Aviation Administration and the National Transportation Safety Board arrived about two hours after the accident to scrutinize the wreckage.

Investigators said it would be at least a day before they could determine a cause for the accident, said Brian Ashton, an FAA official at the scene.

Air traffic controllers at Point Mugu Naval Air Station reported receiving a distress call from the pilot about 2:30. The Cessna had lost power and was at an altitude of about 1,300 feet and falling, said Phyllis Thrower, a Navy spokeswoman.

The plane was bound for Burbank but developed trouble about two miles from the Oxnard Airport, Thrower said.

A representative at Sun-Air declined comment.

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A representative at Sun-Air declined comment.

An instructor at another flight school at the Camarillo Airport said Sun-Air operates a Cessna 210 with the matching tail number.

Hadly is a staff writer and Hobbs is a correspondent. Times staff writer Hilary MacGregor and correspondents Nick Green and David Greenberg contributed to this story.

Kim Hayashi
2510 Lions Gate Drive
Oxnard, CA 93030

May 25, 2017

RECEIVED

JUN 01 2017

Ms. Lisa Cline, Deputy Superintendent
Business and Facilities Service
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

BUSINESS & FISCAL SERVICES

Re: ENVIRONMENTAL IMPACT REPORT NOTICE COMMENT PERIOD, FOR CAMPUS AT DORIS AVENUE AND PATTERSON ROAD

The proposal for a new campus at Doris Avenue and Patterson Road is an unsafe idea; this location is within a mile of the Oxnard Airport.

In the late 1990's, I remember a plane HIT and broke off the chimney of a house on Ivanhoe Avenue, slammed into a light pole on Doris Avenue – breaking off a wing that landed on the street, and the plane then crashed into the field where the proposed school site is.

Doris Avenue/Patterson Road/Ventura Road is a potentially too dangerous place to build a school.

Not to mention the increased traffic on Doris Avenue. It's already a speedway at rush hour now, as is Ventura Road. An elementary school built on a busy street is an accident waiting to happen: drivers speeding to work, stressed-out parents driving their kids to school, and kids that behave unpredictably don't mix well.

Lastly, the farmland is a part of what makes this area great. It should not be lost to more development. Keep our Open Space!

Thank you,



Kim Hayashi

county of ventura

May 30, 2017

Oxnard School District
Attn.: Ms. Lisa Cline
Deputy Superintendent, Business and Fiscal Services
1051 South "A" Street
Oxnard, CA 93030

E-mail: lcline@oxnardsd.org

Subject: Comments on the Notice of Preparation of an Environmental Impact Report for
the Doris Patterson Educational Facilities Project

Dear Ms. Cline

Thank you for the opportunity to review and comment on the subject document. Attached are the comments that we have received resulting from intra-county review of the subject document. Additional comments may have been sent directly to you by other County agencies.

Your proposed responses to these comments should be sent directly to the commenter, with a copy to Clay Downing, Ventura County Planning Division, L#1740, 800 S. Victoria Avenue, Ventura, CA 93009.

If you have any questions regarding any of the comments, please contact the appropriate respondent. Overall questions may be directed to Clay Downing at (805) 650-4047.

Sincerely,



Denice Thomas, Manager
Planning Programs Section

Attachments

County RMA Reference Number 17-014



DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS – M.S. #40

1120 N Street

P. O. BOX 942874

SACRAMENTO, CA 94274-0001

PHONE (916) 654-4959

FAX (916) 653-9531

TTY 711

www.dot.ca.gov

*Making Conservation
a California Way of Life.***RECEIVED**

JUN 06 2017

BUSINESS & FISCAL SERVICES

May 30, 2017

Ms. Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030

Dear Ms. Cline:

Re: Notice of Preparation for the Doris/Patterson Educational Facilities Project;
SCH# 2017051041

The California Department of Transportation, Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety, noise, and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports. The following comments are offered for your consideration.

The proposed project is the Doris Avenue/Patterson Road Educational Facilities Project. The project includes construction and operation of a new elementary and middle school, plus the Oxnard School District (District) administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The project site is located approximately 1,900 feet north of the Runway 7/25 centerline at the Oxnard Airport.

In accordance with CEQA, Public Resources Code Section 21096, the California Airport Land Use Planning Handbook (Handbook) must be utilized as a resource in the preparation of environmental documents for projects within airport land use compatibility plan boundaries or if such a plan has not been adopted, within two miles of an airport. The Handbook is a resource that should be applied to all public use airports and is available on-line at <http://dot.ca.gov/hq/planning/aeronaut/documents/alucp/AirportLandUsePlanningHandbook.pdf>

Protecting people and property on the ground from the potential consequences of near-airport aircraft accidents is a fundamental land use compatibility-planning objective. While the chance of an aircraft injuring someone on the ground is historically quite low, an aircraft accident is a high consequence event. To protect people and property on the ground from the risks of near-airport aircraft accidents, some form of restrictions on land use is essential. The two principal methods for reducing the risk of injury and property damage on the ground are to limit the number of persons in an area and to limit the area covered by occupied structures. The potential severity of an off-airport aircraft accident is highly dependent upon the nature of the land use at the accident site. The Handbook identifies six airport safety zones based on risk levels. The

project site is within Safety Zone 6 for Oxnard Airport as defined in the Handbook. The airport land use compatibility criteria in the Handbook regarding the siting of schools in Safety Zone 6 must be thoroughly addressed through the environmental process and in the Draft Environmental Impact Report (DEIR).

Due to its proximity to the airport, the project site will also be subject to aircraft overflights and subsequent aircraft-related noise impacts. Schools are a noise sensitive land use so aircraft-related noise must be considered and analyzed in the DEIR. All classrooms should be constructed to ensure an interior Community Noise Equivalent Level due to aircraft noise of 45 dB or less. Additionally, the District should grant to the airport proprietor an aviation easement for aircraft noise. The construction methods and the easement, however, will not change exterior aircraft noise levels. It is likely that some students and teachers will be annoyed by aircraft noise in this area. Aircraft noise levels could represent a significant adverse impact on the project.

Education Code Section 17215 requires a school site investigation by the Division prior to acquisition of land for a proposed school site located within two miles of an airport runway. The Division submits recommendations to the State Department of Education for use in determining acceptability of the site. The Division's school site evaluation criteria are available on-line at <http://www.dot.ca.gov/hq/planning/aeronaut/regulations.html>.

California Public Utilities Code (PUC) 21670(f) specifically states that school districts are included among the local agencies that are subject to airport land use laws and other requirements of the PUC.

In accordance with PUC Section 21676 *et seq.*, prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission (ALUC), the local agency shall first refer the proposed action to the ALUC.

If the ALUC determines that the proposed action is inconsistent with the airport land use compatibility plan, the referring agency shall be notified. The local agency may, after a public hearing, propose to overrule the ALUC by a two-thirds vote of its governing body after it makes specific findings. At least 45 days prior to the decision to overrule the ALUC, the local agency's governing body shall provide to the ALUC and the Division a copy of the proposed decision and findings. The Division reviews and comments on the specific findings a local government intends to use when proposing to overrule an ALUC. The Division specifically looks at the proposed findings to gauge their relationship to the overrule. Also, pursuant to the PUC 21670 *et seq.*, findings should show evidence that the local agency is minimizing "...the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses."

In addition to submitting the proposal to the ALUC, it should also be coordinated with Oxnard Airport staff to ensure that the proposal will be compatible with future as well as existing airport operations.

Ms. Lisa Cline
May 30, 2017
Page 3

Section 21659 of the PUC prohibits structural hazards near airports. In accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace" a Notice of Proposed Construction or Alteration (Form 7460-1) may be required by the Federal Aviation Administration (FAA). Form 7460-1 is available on-line at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp> and should be submitted electronically to the FAA.

These comments reflect the areas of concern to the Division with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 5 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please contact me at (916) 654-6223, or by email at philip.crimmins@dot.ca.gov.

Sincerely,



PHILIP CRIMMINS
Aviation Environmental Specialist

c: State Clearinghouse, Ventura County ALUC, County of Ventura Airports



County of Ventura
PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: 5/30/2017

TO: RMA Planning Division
Attention: Clay Downing

FROM: Anitha Balan, Engineering Manager II

SUBJECT: REVIEW OF DOCUMENT 17-014 NOP and IS
Project: **Doris Patterson Educational Facilities Project**
Lead Agency: **Oxnard School District**

Oxnard School District proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road.

Pursuant to your request, the Public Works Agency - Transportation Department has reviewed the NOP and IS for the Doris Patterson Educational Facilities Project.

Oxnard School District (OSD) proposes to construct and operate a new elementary, middle school and District administrative center on a 25-acre site at the southeast corner of Doris Avenue and North Patterson Road. The project site is located within unincorporated Ventura County and within the City of Oxnard Sphere of Influence area. The project will also comprise of an annexation into the City of Oxnard.

The proposed project includes 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite.

We offer the following comment(s):

1. Please send us the DEIR when it becomes available for our review and comment.

2. The construction activities of the proposed project as a whole may have the potential to create a significant cumulative adverse impact on the County Regional Road Network (RRN). Ventura County General Plan Goals, Policies, and Programs Section 4.2.2-6 and Ventura County Ordinance Code, Division 8, Chapter 6 require all new development to pay a Traffic Impact Mitigation Fee (TIMF) to mitigate the

cumulative adverse impacts of traffic on Patterson Road and Doris Avenue. By paying a TIMF, the cumulative traffic impacts can be mitigated to Less Than Significant levels. The TIMF will be based on the amount of traffic generated from the project.

3. Any damage to road structures caused by trucks and construction related trips should be replaced and/or repaired in accordance with County Road Standards.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

RECEIVED

May 31, 2017

JUN 05 2017

Ms. Lisa Cline
Deputy Superintendent, Business & Fiscal Services
Oxnard School District
1051 South "A" Street
Oxnard, CA 93030

BUSINESS & FISCAL SERVICES

RE: Comments on Oxnard School District's Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Doris Patterson Educational Facilities Project

Dear Ms. Cline:

Thank you for the opportunity to review and comment on the Oxnard School District's Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Doris Patterson Educational Facilities Project. The Ventura County Department of Airports offers the following comments for consideration:

Section 1.1 Project Location

In paragraph three of this section, the NOP states the Oxnard Airport has approximately 107 based aircraft and approximately 54,500 operations a year. The correct numbers are as follows: As of December 31, 2016, there were 169 based aircraft and the airport experienced 74,157 operations for calendar year 2016.

Please make this correction throughout the document.

Section 1.3 Other Public Agencies Whose Approval is Required

The "Ventura County Airport Commission" is named incorrectly. The proper name is the Ventura County Airport Land Use Commission (VCALUC). The correction is necessary as the Ventura County Aviation Advisory Commission exists as well as the Oxnard and Camarillo Airport Authorities. The VCALUC is the responsible CEQA agency, but it is anticipated that comments will be provided by the above-referenced entities as well.

Section 2.4.8 e. Hazards and Hazardous Materials

The NOP states the Oxnard Airport has approximately 107 based aircraft and approximately 54,500 operations a year. The correct numbers are as follows: As of

December 31, 2016, there were 169 based aircraft and the airport experienced 74,157 operations for calendar year 2016.

Please make this correction throughout the document.

Section 2.4.6 c. Transportation/Traffic

The NOP states the establishment of educational facilities on the project site is not anticipated to affect air traffic levels at the Oxnard Airport, or change the location of flight paths. Therefore, no impact would result.

It should be noted that this location lies under the Traffic Pattern Zone (TPZ) for the Oxnard Airport. The project site will experience substantial overflight of fixed wing and helicopter aircraft arriving and departing the Oxnard Airport.

Section 2.4.12 e. Noise

The NOP states the Oxnard Airport has approximately 107 based aircraft and approximately 54,500 operations a year. The correct numbers are as follows: As of December 31, 2016, there were 169 based aircraft and the airport experienced 74,157 operations for calendar year 2016.

Please make this correction throughout the document.

Again, the Ventura County Department of Airports appreciates the opportunity to review and comment on the Oxnard School District's NOP of an EIR for the Doris Patterson Educational Facilities Project.

Please feel free to contact me at 805-388-4200 with any questions.

Sincerely,



TODD L. McNAMEE, AAE
Director of Airports

C: Andrea Ozdy, LAFCO
Steve DeGeorge, VCTC
Aviation Advisory Commission
Oxnard Airport Authority

B POTENTIAL NEW SCHOOL SITES ANALYSIS



Oxnard School District Facilities Implementation Program

Potential New School Sites

Southeast Sites (not selected)

1. Rose Avenue between Emerson and Wooley
2. Laurel Street between C street and Saviers Road
3. West of Rose Avenue between Oxnard Blvd. and James Way
4. North of Channel Island Blvd. at Rose Avenue and PCH
5. Wooley Road between Pacific Avenue and Mercantile Street

	Driffill Elementary	McKinna Elementary	Kamala K-8	Elm Elementary	Harrington Elementary	Lemonwood K-8	New Southeast School Site	TOTAL STUDENTS
2013-14 Enrollment	987	685	1032	798	660	901	0	5063
2014-15 Enrollment	1225	699	1305	764	575	1004	0	5572
Permanent Capacity	1240	504	1210	356	504	484	0	4298
Future Permanent Capacity	1240	504	1210	708	800	1100	800	6362
2023 -24 Proposed Enrollment	1150	500	1150	700	700	1150	700	6050
								1274
								12

- * Current enrollment exceed permanent capacity by 1274 children
- * Proposed enrollment in 2023 would accommodate all children in permanent facilities and leave an addition 10-12 classrooms for growth
- * All figures are based on existing local loading standards

SE School Sites					
Site Name	Site Location & Size	Region	Grade Level	CFW Ranking	CDE Status & Comments
Southeast	(14 acres) East of El Dorado Ave. between the extension of Dickenson & Gershwin	SE	Elem		1 District requested CDE approval letter in 1998. In 2000, LAFCO denied annexation request by City of Oxnard. Accepted by CDE; Best choice of SE sites reviewed in '97; No known geohazards, plugged and abandoned dry well possible on or near east side of site.
Emerson Ave.	North of Emerson Ave between extension of Alexander and Dupont	SE	Elem		2 Possibly acceptable as alternate; Possible plugged and abandoned oil producing well on site
SE Quadrant - Site 19	(53 acres) Rose Ave. between Emerson & Wooley	SE	Elem		3 Approvable if all environmental hazards to adequately addressed and mitigated. Site is adjacent to Emerson Ave. site above. School must be set back from Rose Ave due to heavy traffic. Good location for neighborhood school. PEA likely to be required due to ag-use and historical oil field area. Ag buffers may make site infeasible. Traffic study required and safe routes plan due to proximity to Rose Ave.
SE Quadrant - Site 14	(10 acres) Laurel St. between C St. and Saviers Rd.	SE	Elem		4 Approvable if all environmental hazards to adequately addressed and mitigated. Good location for neighborhood school. Existing structures from private high school, may not comply w/ Field Act. Proximity to Saviers Rd. will require traffic study and safe routes plan.
SE Quadrant - Site 15	(11 acres) Channel Is. Blvd. between Ventura Rd & Manzanita Dr.	SE	Elem		5 Approvable if all environmental hazards to adequately addressed and mitigated. Safe routes & bussing will be required due to high traffic corridors adjacent. Powerline and pipeline studies will be required. Existing fuel station on site may require environmental remediation.
Oxnard Blvd. - SE quadrant Site #10	(12 acres) West of Rose Ave. between Oxnards Blvd and James Way	SE	Elem	N/A	Rejected; inappropriate shape (too narrow), high traffic area, backs up to freeway; Plugged and abandoned oil producing well on site.
Channel Islands Blvd. SE Quadrant Site #9	North of Channel Is. Blvd at Rose Ave and PCH;	SE	Elem	N/A	Rejected; high traffic area on three surrounding streets; Plugged and abandoned producing oil well on site
SE Quadrant - Site 16 (former drive-in theater)	(11.6 acres) Wooley Rd between PCH & Industrial Ave.	SE	Elem	N/A	Rejected; Site is in heavily industrial area of Oxnard, surrounded by all the industrial hazards school should avoid. Site received lowest ranking of all sites studied.
SE Quadrant - Site 8	(25 acres) Wooley Rd. between Pacific Ave and Mercantile St.	SE	Inter	N/A	Rejected. Site is poorly located near too many environmental hazards.
NE School Sites					
Site Name	Site Location & Size	Region	Grade Level	CFW Ranking	CDE Status & Comments
NE Quadrant - Site 6	(7.5 acres) Camino del Sol & Rose Ave	NE	Elem		1 Approvable, small site, may require joint-use. Good prospect for neighborhood school paired w/ Rose Ave. elem one block away.
NE Quadrant - Site 11	(9 acres) Oxnard Blvd @ Glenwood Dr.	NE	Elem		2 Site is approvable technically, but is not ideal due to several environmental hazards. Located on busy state hwy, RR tracks adjacent, within airport turning zone, likely contamination from auto dealer prior use. Good site for neighborhood school.
NE Quadrant - Site 12	(11 acres) Oxnard Blvd at Robert Ave	NE	Elem	N/A	APPEARS THAT MAJORITY OF PROSPECTIVE SITE HAS BEEN DEVELOPED AS RESIDENTIAL SINCE CDE REVIEW. Site is approvable technically, but is not ideal due to several environmental hazards. Located on busy state hwy, RR tracks adjacent, within airport turning zone, likely contamination from auto dealer prior use.

Site Name	Site Location & Size	Region	Grade Level	CFW Ranking	CDE Status & Comments
NE Quadrant - Site 5	(45 acres) Oxnard Blvd between Camino del Sol & Morado Pl, west of Frank	NE	Elem	N/A	IT APPEARS THIS SITE HAS BEEN DEVELOPED FOR RESIDENTIAL IN THE TIME SINCE CDE REVIEW. Approvable, good CDE ranking (2 of 5), would have to be set back from PCH and RR tracks.
NE Quadrant - Site 22 (Fremont School)	East section of Fremont playfields	NE	Elem	N/A	Not recommended as it would inhibit future growth at Fremont.
St. John's - NE Quadrant Site 13	Corner of Doris Ave and F St.	NE	Elem	N/A	Rejected; too small, too narrow, too close to Oxnard airport; Requires extensive demolition of existing former hospital structure and abatement of asbestos and lead-based paint, possible water well on-site
NE Quadrant - Site 7	(13 acres) Rose Ave between 3rd and 5th	NE	Elem	N/A	Rejected; Too many environmental hazards to be feasibly mitigated. 5 sets of RR tracks run south of site. Area is prone to flooding w/ high water table.
SW School Sites					
Site Name	Site Location & Size	Region	Grade Level	CFW Ranking	CDE Status & Comments
Southwest "Seabridge"	(6 acres) Near SW corner of Wooley Rd/Victoria Ave.	SW	Elem	1	District has acquired this site for a new K-5 elementary, and is near obtaining CDE approval
SW Quadrant - Site 18	(10 acres) Hemlock St between Victoria and Fisher Dr.	SW	Elem	2	Potentially approvable but not ideal. Likely to required condemnation, relocation of housing/biz tenants. High likelihood of signification env. Remediation due to fuel station on site.
SW Quadrant - Site 4	(130 acres) Victoria Ave between Hemlock & Wooley	SW	Elem	N/A	NOT AVAILABLE. This area has been fully developed as the Seabridge residential community.
NW School Sites					
Site Name	Site Location & Size	Region	Grade Level	CFW Ranking	CDE Status & Comments
Doris/Patterson Site	Corner of Doris/Patterson	NW	Inter.	1	No CDE review documentation provided at this time.
NW Quadrant - Site 28	(76 acres) Gonzales Rd. south of Oxnard HS, along Patterson Rd	NW	Elem	2	Approvable site, near Marshall Elem. No add'l comments sheet avail. from District.
West	Near NE corner of Doris and Victoria Ave.	NW	Inter.	3	Acceptable; Geohazards not known, possible water wells on site
Northwest - Site 3	(27 acres) Near northwest corner of Patterson and Gonzalez	NW	Elem/ Inter.	4	LARGE PORTION OF SITE APPEARS TO HAVE BEEN DEVELOPED AS SOLAR SITE SINCE REVIEW. ONLY 10+ ACRES MAY STILL BE AVAIL. Accepted; best choice of site in this area reviewed in '97; Geohazards not known, possible water wells on or near NE corner of site; Air quality test recommended due to proximity to landfill.
NW Quadrant - Site 2	(19 acres) Vineyard Ave @ Ventura Rd	NW	Elem	5	Approvable, good site, but poorly located. Near former city dump site, bounded by two high traffic corridors, Northern extent of District, with Marshall & Sierra Linda serving same population. PEA is a near certainty.

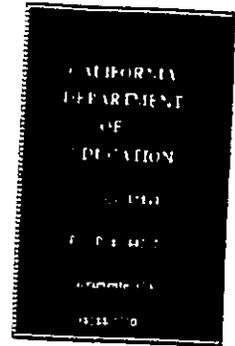


DELAINÉ EASTIN
State Superintendent of Public Instruction

RECEIVED

SEP 13 1997

BUSINESS OFFICE



September 11, 1997

Department of General Services
Office of Public School Construction
501 J Street, Suite 350
Sacramento, CA 95814

RE: FIVE-YEAR FACILITY PLAN
Received: September 5, 1997
OXNARD ELEMENTARY
SCHOOL DISTRICT
Ventura County

Project Number(s):

Project Number(s) Pending:

<u>School Name</u>	<u>Type of Project</u>
Northwest Elementary	New Construction
Southeast Elementary	"
Southwest Elementary	"
Northwest Intermediate	"

Approval has been given by the California Department of Education to the Five-Year Facility Plan for the above referenced project(s). Please be advised that a new or revised Five-Year Facility Plan is required for each new amended application filed with the SAB which is not addressed in a current Five-Year Facility Plan.

NOTE: District elementary schools capacity should reflect 20 to 1 loading for up to four grade levels (K-3) if the district is planning to implement Class Size Reduction over the next five years. There will be a significant increase in unhousted ADA that the district should account for in its housing plan.

Sincerely,

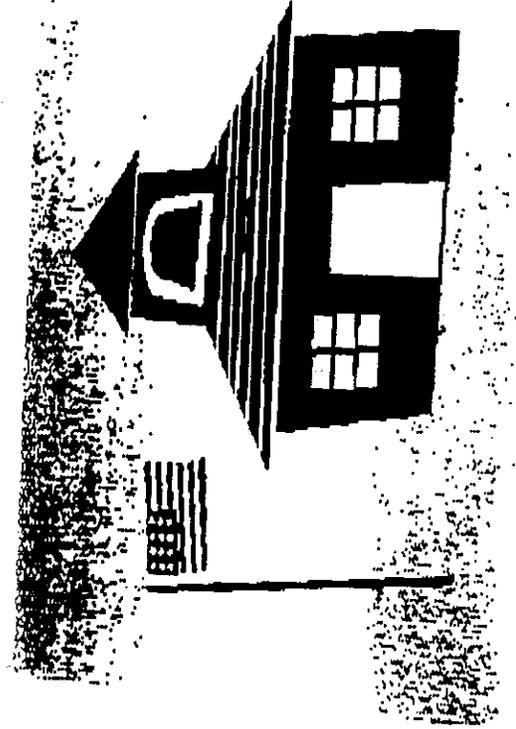
Henry Heydt, Ed.D., Assistant Director
School Facilities Planning Division
(916) 322-1461

Stan Rose, Consultant
School Facilities Planning Division
(916) 322-1463

SR:dk

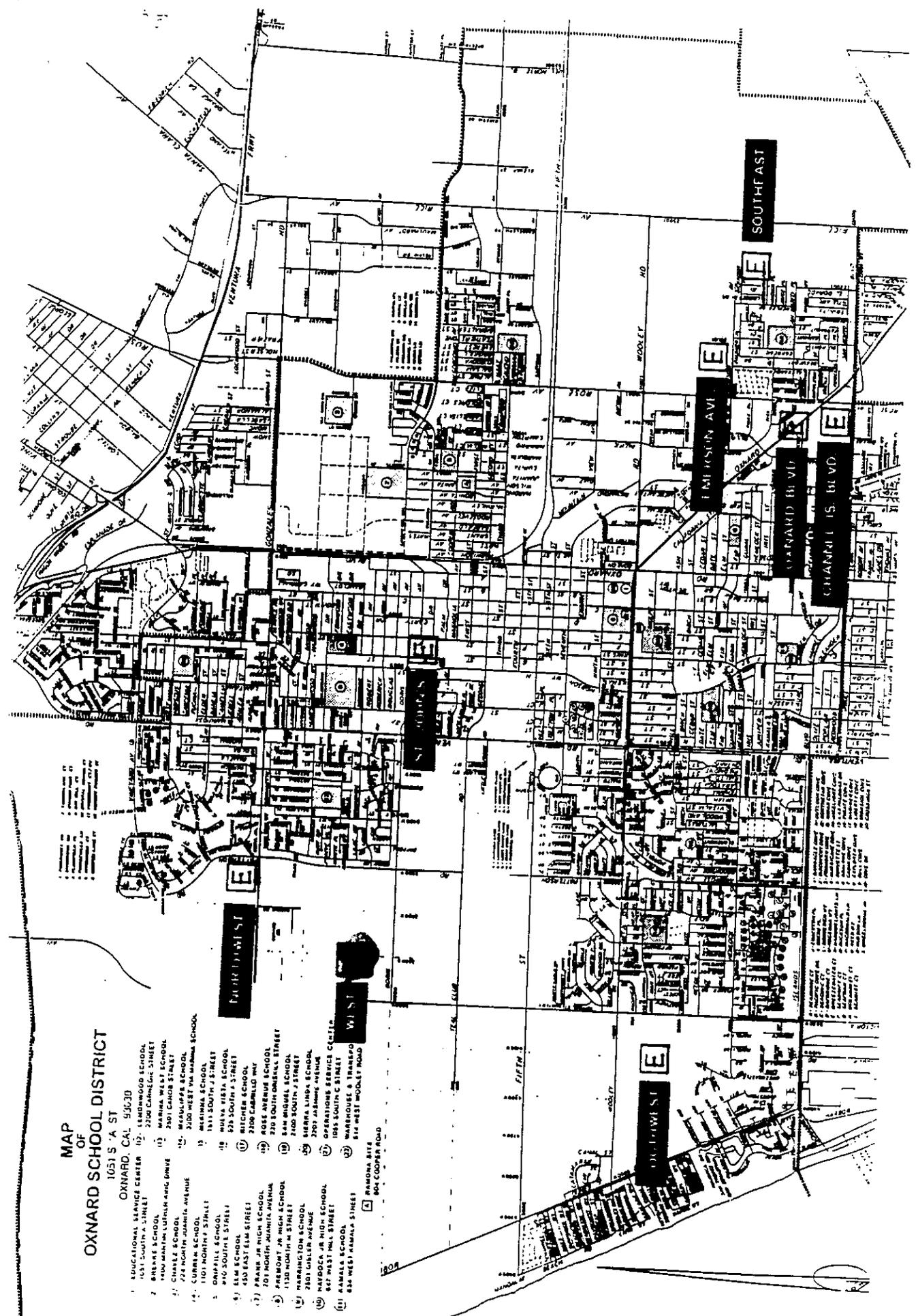
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PROPOSED NEW SCHOOL SITES
CALIFORNIA DEPARTMENT OF EDUCATION
SITE REVIEW AND EVALUATION
September 23, 1997



**MAP OF
OXNARD SCHOOL DISTRICT**
1051 S. 'A' ST
OXNARD, CAL. 93030

- 1 EDUCATIONAL SERVICE CENTER 102- 1435 BROADWOOD SCHOOL
- 2 45ST SOUTH A STREET 103- 2200 WASHINGTON STREET
- 3 BRYAN SCHOOL 104- 2300 WASHINGTON STREET
- 4 940 WASHINGTON LUTHERAN CHURCH DRIVE 2301 CANON STREET
- 5 CHARLES SCHOOL 105- 2640 WASHINGTON STREET
- 6 724 NORTH JUDITH AVENUE 3000 WEST VIA MARINA SCHOOL
- 7 LUTHER SCHOOL 106- 1811 SOUTH J STREET
- 8 1001 MONTY STREET 107- 925 SOUTH A STREET
- 9 844 SCHOOL 108- 2100 CARROLL HWY
- 10 450 EAST 14TH STREET 109- 220 SOUTH OMEGA STREET
- 11 701 MONTY HIGH SCHOOL 110- 840 BIRGUEL SCHOOL
- 12 1130 WASHINGTON STREET 111- 2000 SOUTH J STREET
- 13 HARRINGTON SCHOOL 112- 3100 SHERRILL AVENUE
- 14 HAYDOCK JR HIGH SCHOOL 113- 1055 SOUTH C STREET
- 15 847 WEST 14th STREET 114- 217 WEST MOBLEY ROAD
- 16 KAMALA SCHOOL 115- 217 WEST MOBLEY ROAD
- 17 834 WEST KAMALA STREET 116- 217 WEST MOBLEY ROAD



**PROPOSED NEW SCHOOL SITES
CALIFORNIA DEPARTMENT OF EDUCATION
SITE REVIEW AND EVALUATION
September 23, 1997**

SITE	STREET BOUNDS	CORLEY REPORT	GRADE LEVEL	STATUS	GEOHAZARDS	FLYOVER
Southeast	East of El Dorado Avenue between the extension of Dickenson and Gershwin.	SE-3	Elem.	Accepted; best choice in this area of the city.	None known; plugged and abandoned non-producing dry well possibly on or near east side of school site.	No.
Emerson Avenue	North of Emerson Avenue between extension of Alexander and Dupont.	N/A	Elem.	Possibly acceptable as an alternate site.	Possible plugged and abandoned producing oil well on site.	No.
Oxnard Blvd.	West of Rose Avenue between Oxnard Blvd. and James Way.	SE-2	Elem.	Rejected; inappropriate shape (too narrow), high traffic area, backs up to freeway.	Plugged and abandoned producing oil well on site.	No.
Channel Islands Blvd.	North of Channel Is. Blvd. at Rose Ave. and PCH.	SE-1	Elem.	Rejected; high traffic area on three surrounding streets.	Plugged and abandoned producing oil well on site.	No.
Northwest	Near northwest corner of Patterson and Gonzales.	NW-1	Elem.	Accepted; best choice in this area of the city.	None known; possible water wells on or near NE corner of proposed school site. Air quality test recommended due to proximity of closed land fill.	Maybe.
St. John's	Corner of Doris Avenue and 'F' Street.	NW-4	Elem.	Rejected; too small, too narrow, too close to Oxnard airport.	Requires extensive demolition of existing former hospital structure and abatement of asbestos and lead-based paint; possible water well on site.	Yes.
Southwest	Near southwest corner of Woolley Road and Victoria Avenue.	NW-5	Elem.	Acceptable.	None known; water wells near northwest corner of school site.	Yes.
West	Near northeast corner of Doris and Victoria Avenue.	N/A	Inter.	Acceptable.	None known; possible water wells on school site.	Yes.

SITE REVIEW AND EVALUATION GLOSSARY OF TERMS

SITE

The geographical identifier used by the California Department of Education (CDE) for potential school site location review.

STREET BOUNDS

Generally, the major streets adjacent to the site.

CORLEY REPORT

The Site Summary and Evaluation of September 17, 1997, prepared by Rob Corley. The alpha-numeric characters in this column correspond to the sites listed on page 3 of the report.

GRADE LEVEL

The grade level to be served by the facility, i.e., elem. = K-6; inter. = 7-8.

STATUS

Conclusion reached by CDE regarding the appropriateness of each location for use as a school site. Known or suspected soil conditions to date.

GEOHAZARDS

FLYOVER

CDE requires the California Department of Transportation, Division of Aeronautics, to evaluate a potential school site for suitability by physically flying over the site if such site is within two miles of an airport runway or heliport pad.

STATE OF CALIFORNIA
 DEPARTMENT OF CONSERVATION
 DIVISION OF OIL, GAS,
 AND GEOTHERMAL RESOURCES



JANUARY 11, 1997

LEGEND

- DRILLING
- ◊ 67-2613 DRILLING - IDLE
- ◊ PLUGGED AND ABANDONED - DRY HOLE (showing year drilled & total depth)
- COMPLETED - OIL
- ◊ IDLE - OIL
- ◊ PLUGGED AND ABANDONED - OIL
- * COMPLETED - GAS
- ◊ IDLE - GAS
- ◊ PLUGGED AND ABANDONED - GAS
- ◊ COMPLETED - WATER INJECTION
- ◊ COMPLETED - WATER DISPOSAL
- ////// FIELD BOUNDARY
- PROJECTED SECTION
- ◊ COMPLETED - STEAMFLOOD
- ◊ OBSERVATION
- ◊ BURIED IDLE

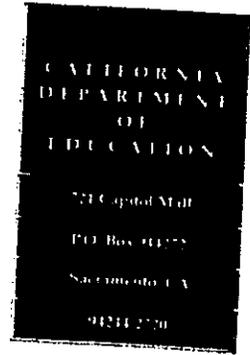
NOTE:

WELLS WITH DIRECTIONAL SURVEYS ON FILE WITH THE DIVISION OF OIL AND GAS ARE INDICATED WITH A SHORT LINE UNDER THE WELL SYMBOL
 CURRENT WELL STATUS SHOULD BE CONFIRMED AT THE APPROPRIATE DIVISION OF OIL AND GAS DISTRICT OFFICE.

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES
 801 K STREET, MS 20, SACRAMENTO, CALIFORNIA 95814



DELAINÉ EASTIN
State Superintendent of Public Instruction



May 13, 1998

Dr. Ron Weinert, Director Facilities
Oxnard School District
1055 South C Street
Oxnard, CA 93030-7492

Dear Dr. Weinert:

Enclosed is the preliminary approval of the South East site that was reviewed on March 11, 1996.

When the various requirements set forth in SFPD 4.01 – School Site Approval Procedures are received by this office in acceptable order, final approval of the site can be issued by the Department of Education.

If you have questions or require information, please call my office.

Sincerely,

Stan Rose, Consultant
School Facilities Planning Division
(916) 322-1463

SR:jlj

RECEIVED
FACILITIES
OXNARD SCHOOL DISTRICT
1998 MAY 15 P 12:09



SCHOOL FACILITIES
PLANNING DIVISION

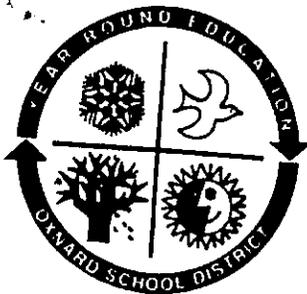
CALIFORNIA DEPARTMENT
OF EDUCATION

SCHOOL FACILITIES PLANNING DIVISION FIELD SITE REVIEW

SFPD 4.0

Application no. <u>22/</u>	Site identification South East Elementary	Date 9/9/97
CDE consultant Stan Rose	District Oxnard Elementary	County Ventura
Grade level: K-6	Size of site: 12 AC	CDE recommended size 12.4AC
Max. enroll: 900	Gross acres: 12 AC	Net useable acres: 11 AC
Site location (Major cross streets) Emerson Place	Est. land value per acre \$60,000	
Hazards: Seismic <input checked="" type="checkbox"/> Traffic _____ Toxic _____ Flood _____ Gas Trans. lines _____ Electric Trans. lines _____ Railroad _____ Other: _____		
Utilities: Give distance to nearest line of suitable capacity. Gas _____ Water _____ Sewer _____ Electricity _____ Storm Drain _____		
Special needs: Well _____ Septic _____ Other _____		
Topography of site: Level _____ Rolling _____ Sloping _____ Steep _____ Other _____		
All Utilities at Site _____		
Site Development: comment on any of the following which presents a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks <u>No Concerns</u>		
Are there existing structures on the site which need to be removed or demolished? Yes _____ No <input checked="" type="checkbox"/> Comment: _____		
Is condemnation required? Yes _____ No <input checked="" type="checkbox"/> Unknown _____ Comment: _____		
Street improvements: y=yes n=no p=proposed Sidewalk <u>P</u> Curb & gutter <u>P</u> Street paving <u>P</u> Street lighting _____ Fire hydrant <u>Y</u> Comments (1 or more sides, etc.) _____		
Funding: State _____ Local <input checked="" type="checkbox"/> Developer _____ Other _____		
Within two miles of airport runway? Yes _____ No <input checked="" type="checkbox"/> Heliport? Yes <input checked="" type="checkbox"/> No _____		
Ranking by CDE: <u>1</u> 2 3 4 5 High Low		
Is the site approvable upon satisfactory completion of SFPD: 4.01, 4.02 & 4.03? Yes <input checked="" type="checkbox"/> No _____ If no, comment _____		

Draw or attach a site diagram on the back of this form
*Please Note: This site review DOES NOT constitute a final site approval. District shall complete and submit SFPD forms 4.01, 4.02 and 4.03.



OXNARD SCHOOL DISTRICT

1051 SOUTH "A" STREET • OXNARD, CALIFORNIA 93030 • 805 / 487-3918

RECEIVED
FEB 23 1998

February 20, 1998

BUSINESS OFFICE

BOARD OF TRUSTEES

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Business and Fiscal Services

DAVID A. GOMEZ
Assistant Superintendent
Human Resources and
Support Services

California Department of Education
School Facilities Planning Division
Post Office Box 944272
Sacramento, California 94244-2720

Attn: Stan Rose
Consultant, School Facilities Planning

Subj: Request for Preliminary Site Approval
Southeast Elementary School Site

Dear Mr. Rose:

Oxnard School District hereby requests preliminary site approval for construction of Juan Soria Elementary School; enclosed are the following documents:

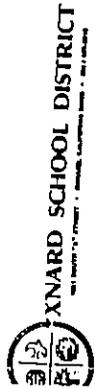
District map showing site of proposed new school
Site survey showing dimensions and gross/net acreage
Six copies of the legal description of the proposed site

Remaining documents listed on SFP form 4.01 will be forwarded in the coming weeks with our request for final site approval. Please advise if there is anything else you need from us at this time to effect preliminary approval.

Sincerely yours,

Dr. Ronald A. Weinert
Director of Facilities

Copy to:
Sandra Herrera
Robert Lundskog
Rick Mello



XNARD SCHOOL DISTRICT
 1000 NORTH J STREET, SAN MATEO, CALIFORNIA 94401

- 1 EDUCATIONAL SERVICE CENTER
- 2 1031 SOUTH A STREET
- 3 BREKKE SCHOOL
- 4 1400 MARTIN LUTHER KING DRIVE
- 5 CHATEZ SCHOOL
- 6 224 NORTH JUANA AVENUE
- 7 CORMER SCHOOL
- 8 1101 HORNBY STREET
- 9 DUFFILL SCHOOL
- 10 614 SOUTH E STREET
- 11 480 EAST STREET
- 12 FRANK JR HIGH SCHOOL
- 13 701 NORTH WILSON AVENUE
- 14 1130 NORTH M STREET
- 15 HARRINGTON SCHOOL
- 16 2101 DELER AVENUE
- 17 HAYDOCK JR HIGH SCHOOL
- 18 847 WEST HILL STREET
- 19 KAMALLA SCHOOL
- 20 834 WEST KAMALLA STREET
- 21 PANDORA SITE 804 COOPER ROAD
- 22 2000 CANNON STREET
- 23 MARINA WEST SCHOOL
- 24 2601 CANON STREET
- 25 WAULIFE SCHOOL
- 26 3200 WEST VA MARINA SCHOOL
- 27 MACHINA SCHOOL
- 28 1811 SOUTH J STREET
- 29 NUEVA VISTA SCHOOL
- 30 825 SOUTH A STREET
- 31 RITCHER SCHOOL
- 32 2200 CARNELL WAY
- 33 ROSE AVENUE SCHOOL
- 34 278 SOUTH BRISBANE STREET
- 35 SAN MIGUEL SCHOOL
- 36 2408 SOUTH J STREET
- 37 SIERRA LINDA SCHOOL
- 38 1701 JASMINE AVENUE
- 39 OPERATIONS SERVICE CENTER
- 40 1053 SOUTH C STREET
- 41 WAREHOUSE & TRANSPORTATION
- 42 514 WEST WOOLLEY ROAD

SAN BUENAVENTURA SCHOOL DISTRICT

RIO SCHOOL DISTRICT

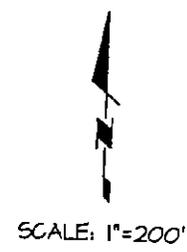
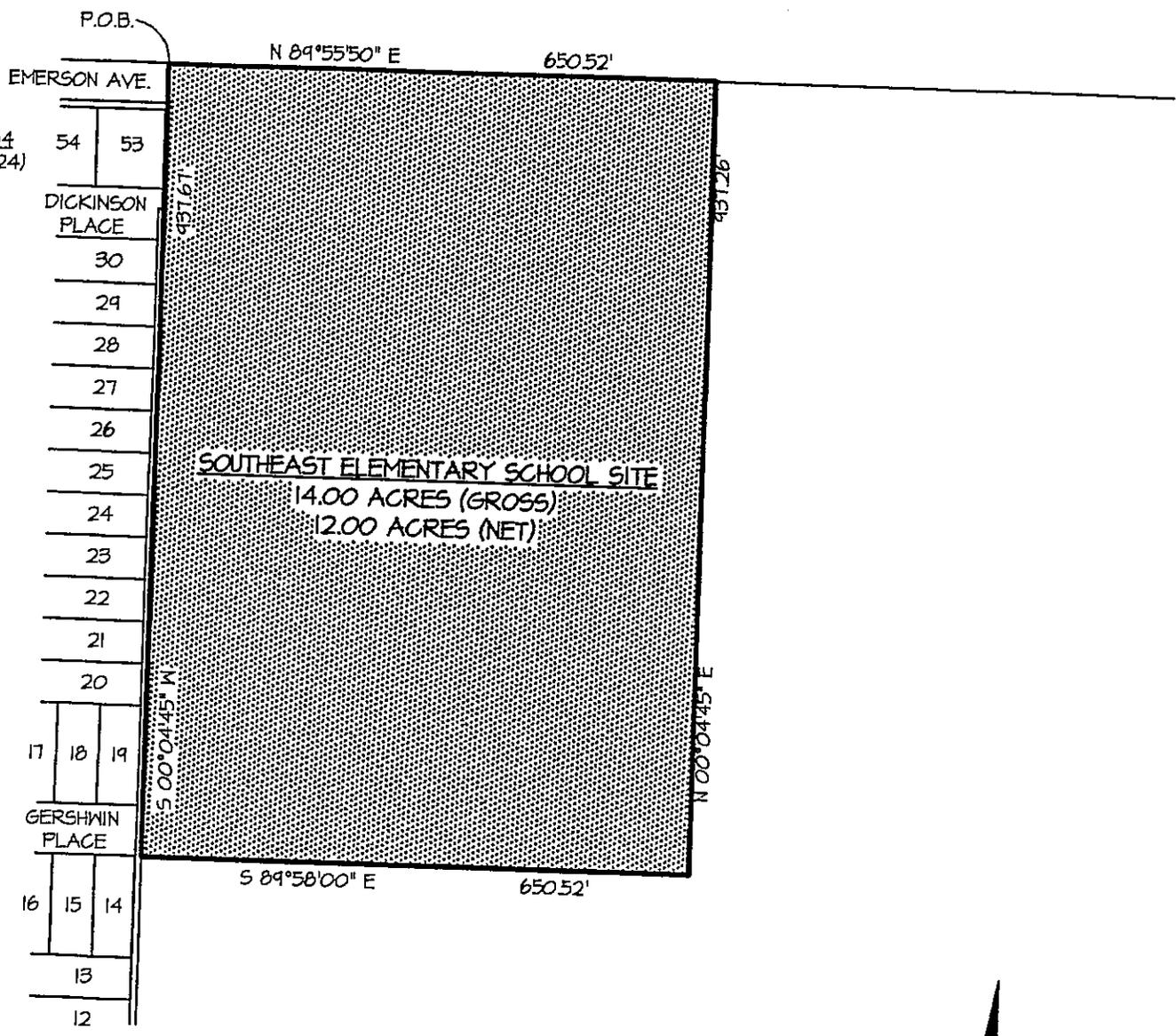
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OCEAN VIEW SCHOOL DISTRICT

HUENEME SCHOOL DISTRICT

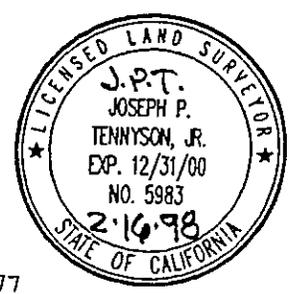
PACIFIC OCEAN





SHADDED AREA DENOTES
 LAND DESCRIBED IN THE
 ATTACHED EXHIBIT "A"

Joseph P. Tennyson, Jr. 2-16-98
 JOSEPH P. TENNYSON, JR. DATE
 LS 5983 (EXP. 12-31-00)



0XK02451N2451E1XBI

EXHIBIT "A"
(Southeast Elementary School Site)

A portion of Subdivision 41, Rancho El Rio De Santa Clara O'La Colonia, in the county of Ventura, state of California, as per partition map filed in the office of the Recorded of said county, in an action entitled "Thomas A. Scott, et al., Plffs. Vs. Rafael Gonzales, et al., Defts.", described as follows:

Beginning at a five-inch iron pipe tagged "R.E. 4825" set on the northerly line of said Subdivision 41, at the northwesterly corner of the land described as Parcel 1 in the deed recorded as Document Number 96-122671, Official Records of said county; thence along the westerly line of said Parcel 1,

1st South 00°04'45" West, a distance of 937.67 feet to a point on the easterly prolongation of the southerly line of Gershwin Place, as shown on the map of Tract No. 2602 recorded in Book 81 at Page 75 of Miscellaneous Records of said county; thence along said prolongation,

2nd South 89°58'00" East, a distance of 650.52 feet; thence along a line parallel with the above described first course,

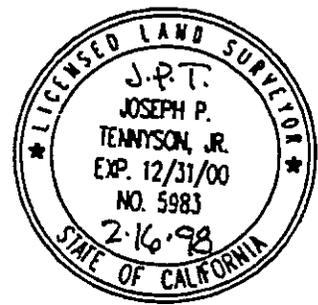
3rd North 00°04'45" East, a distance of 937.26 feet to the northerly line of said Subdivision 41; thence along same,

4th North 89°55'50" West, a distance of 650.52 feet to the Point of Beginning.

The above described parcel of land contains 14.00 Acres, more or less.

Joseph P. Tennyson, Jr.
Joseph P. Tennyson, Jr.
LS5983 (Exp. 12-31-00)

2-16-98
Date





MEMORANDUM

DATE: December 4, 2000

TO: City of Oxnard
Marilyn Miller
305 W. Third Street
Oxnard, CA 93030

FROM: Debbie Schubert
Clerk to the Commission

SUBJECT: Resolution of Denial 00-14S Amendment to the City of Oxnard Sphere of
Influence and
LAFCO 00-14 Juan Soria Reorganization

For your files or for your appropriate action, attached are copies of the resolutions, maps and legal descriptions for LAFCO 00-14S and LAFCO 00-14 that the LAFCO Commission heard and denied at the LAFCO meeting of November 15, 2000.

Please let us know if you have any questions or concerns pertaining to the attached documents.

Certif. of Map

12-4-00

7000 06-00 0025 1048 4908

LAFCO 00-14

**RESOLUTION OF THE VENTURA LOCAL AGENCY
FORMATION COMMISSION MAKING DETERMINATIONS
AND DENYING THE JUAN SORIA REORGANIZATION –
ANNEXATION TO THE CITY OF OXNARD, DETACHMENT
FROM THE VENTURA COUNTY FIRE PROTECTION
DISTRICT AND DETACHMENT FROM THE VENTURA
COUNTY RESOURCE CONSERVATION DISTRICT**

WHEREAS, the above-referenced proposal has been filed with the Executive Officer of the Ventura Local Agency Formation Commission pursuant to the Cortese/Knox Local Government Reorganization Act (Section 56000 of the California Government Code); and

WHEREAS, at the times and in the manner required by law, the Executive Officer gave notice of the consideration by the Commission on the proposal; and

WHEREAS, the proposal was duly considered and denied on November 15, 2000; and

WHEREAS, the Commission heard, discussed and considered all oral and written testimony for and against the request including, but not limited to, the Executive Officer's report and recommendation; and

WHEREAS, information satisfactory to this Commission has been presented that all the owners of land within the affected territory have given their written consent to the proposal; and

WHEREAS, the Local Agency Formation Commission finds the proposal to be inconsistent with Government Code Section 56377, with the encouragement of the orderly development of the City based upon local conditions and policies and not in the best interest of the affected area and the organization of local governmental agencies within Ventura County;

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Local Agency Formation Commission of Ventura County as follows:

- (1) The Executive Officer's Staff Report and Recommendation for denial of the proposal dated November 15, 2000 is adopted.
- (2) Said reorganization as set forth in Exhibit A attached hereto and made a part hereof is hereby denied as recommended by the Executive Officer.

This resolution was adopted on November 15, 2000.

AYES: Commissioners Rush, Curtis, Cunningham, Alternate Commissioner Schillo and Chair Sullivan

NOES: None

ABSTAINS: Commissioners Mikels, Long and Alternate Commissioner Zaragoza

Dated:

11/15/00

Robert S. Sullivan
Chair, Ventura Local Agency Formation Commission

Copies: City of Oxnard via Certified Mail
Assessor
Auditor
Elections
Surveyor

EXHIBIT A

JUAN SORIA REORGANIZATION

ANNEXATION TO THE CITY OF OXNARD AND DETACHMENT FROM THE VENTURA COUNTY RESOURCE CONSERVATION DISTRICT AND DETACHMENT FROM THE VENTURA COUNTY FIRE PROTECTION DISTRICT

That portion of Subdivision 41 of the Rancho El Rio De Santa Clara O' La Colonia, in the County of Ventura, State of California, as per Partition Map filed in the Office of the County Clerk of said County, in an action entitled "Thomas A. Scott, et al., Plaintiffs, versus Rafael Gonzalez, et al., Defendants", described as follows:

Beginning at a point on the northerly line of said Subdivision 41, being the northwest corner of the land described in the deed to Roscoe Daily, et al., recorded July 9, 1956, in Book 1422, Page 301 of Official Records of said County, being also the easterly terminus of the 2nd course of Annexation No. 63-2 to the City of Oxnard as ordained by the City Council in Ordinance No. 824 on April 9, 1963;

Thence 1st, S. 00°04'45" W., along the existing boundary of said City of Oxnard, being also the westerly line of said land, a distance of 921.67 feet;

Thence 2nd, S. 89°58'00" E., a distance of 661.82 feet;

Thence 3rd, N. 00°04'45" E., parallel to said westerly line, a distance of 921.25 feet to said northerly line of Subdivision 41;

Thence 4th, N. 89°55'50" W., along said northerly line, a distance of 661.82 feet to the Point of Beginning.

Containing 14.00 acres, more or less.



RH
18 Oct. 2000

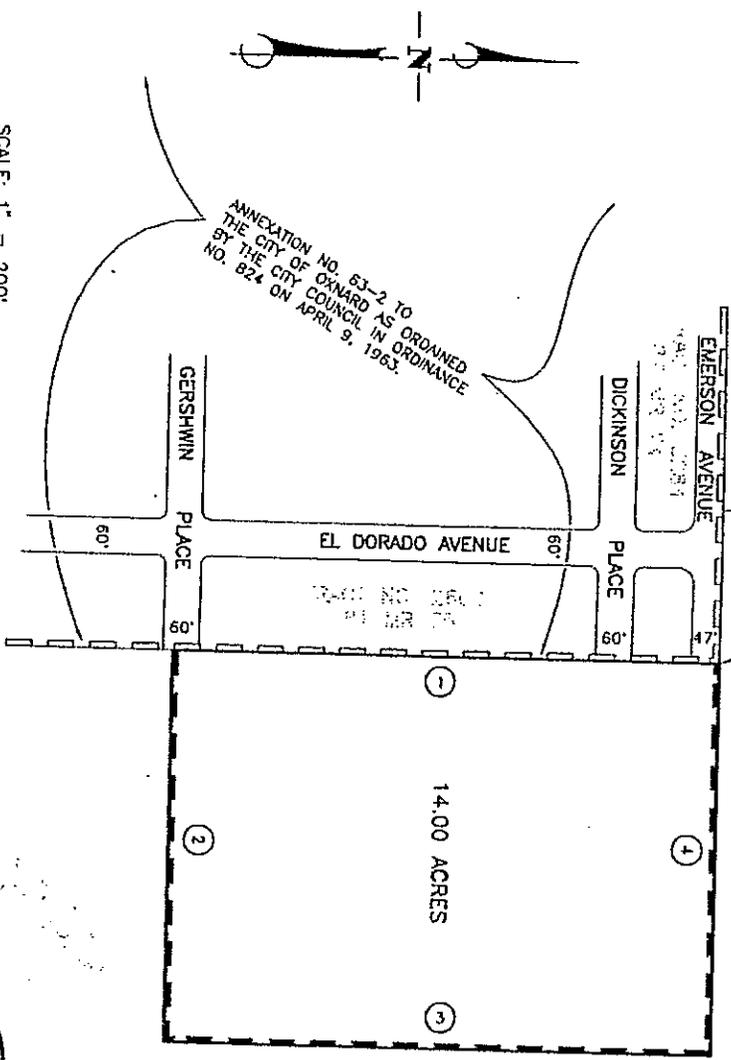
Page 1 of 1

EXHIBIT 12

NORTHERLY LINE OF SUBDIVISION 41
RANCHO EL RIO DE SANTA CLARA O'LA COLONIA

POINT OF BEGINNING
NORTHWEST CORNER OF THE LAND DESCRIBED IN THE DEED TO
ROSCOE DALRY ET AL. RECORDED JULY 9, 1956 IN BOOK 1422
PAGE 301 OF OFFICIAL RECORDS OF VENTURA COUNTY,
EASTERLY TERMINUS OF THE 2ND COURSE OF ANNEXATION
NO. 63-2 TO THE CITY OF OXNARD.

ANNEXATION NO. 63-2 TO
THE CITY OF OXNARD AS ORDAINED
BY THE CITY COUNCIL IN ORDINANCE
NO. 824 ON APRIL 9, 1963.



COURSE TABLE

Course Number	Direction	Distance	Area
1	S 0°04'45\"	W	921.67
2	S 89°58'00\"	E	661.82
3	N 0°04'45\"	E	921.25
4	N 89°53'50\"	W	661.82



18 Oct. 2000

VICINITY MAP

NOT TO SCALE



LEGEND

- INDICATES EXISTING CITY OF OXNARD BOUNDARY
- INDICATES PROPOSED CITY OF OXNARD BOUNDARY
- COURSE NUMBER

JUAN SORIA REORGANIZATION

ANNEXATION TO THE CITY OF OXNARD AND
DETACHMENT FROM THE VENTURA COUNTY RESOURCE
CONSERVATION DISTRICT AND DETACHMENT FROM THE
VENTURA COUNTY FIRE PROTECTION DISTRICT

A PORTION OF SUBDIVISION 41 OF THE RANCHO EL RIO DE SANTA CLARA
O'LA COLONIA, IN THE COUNTY OF VENTURA, STATE OF CALIFORNIA, AS
PER PARTITION MAP FILED IN THE OFFICE OF THE COUNTY CLERK OF
SAID COUNTY IN AN ACTION ENTITLED "THOMAS A. SCOTT, ET AL.,
PLAINTIFFS VERSUS RAFAEL GONZALES, ET AL., DEFENDANTS"

OCTOBER 2000

PREPARED BY:
Pentfield & Smith
ENGINEERS • SURVEYORS
111 E. VICTORIA ST. SANTA BARBARA
(805) 963-9532 CALIF. 93101
MAILING ADDRESS: P.O. BOX 98 (93102)

13271 01 Oxnard map 18 OCTOBER 2000



AGENDA

WEDNESDAY, November 15, 2000

Board of Supervisors Hearing Room
Hall of Administration
800 South Victoria Avenue
Ventura, CA 93009

9:00 A.M.

1. Call to Order
2. Pledge of Allegiance
3. Roll call
4. Secretary administers oath to interested parties who are to give testimony

COMMENTS FROM THE PUBLIC

5. **Public Comment** - This is an opportunity for members of the public to speak on items not on the agenda.

(The Ventura Local Agency Formation Commission encourages all interested parties to speak on any issue on this agenda in which they have an interest, or on any matter subject to LAFCO jurisdiction. It is the desire of LAFCO that its business be conducted in an orderly and efficient manner. All speakers are requested to fill out a Speakers Card and submit it to the Secretary prior to speaking. All speakers are requested to present their information to LAFCO as succinctly as possible with a five (5) minute time limit.

COMMISSIONERS AND STAFF:

COUNTY:
Kathy Long
Judy Mikels
Frank Schillo, Alternate

CITY:
Robin Sullivan, Chair
James L. Monahan
John Zaragoza, Alternate

PUBLIC:
Louis Cunningham
Kenneth M. Hess,
Alternate

SPECIAL DISTRICT:
John Rush, Vice Chair
Jack Curtis
F.W.(Dick)Richardson
Alternate

EXECUTIVE OFFICER:
Everett Millais

LEGAL COUNSEL:
Noel Klebaum

CLERK TO THE COMMISSION:
Debbie Schubert

Allowing an individual to speak more than five minutes is at the discretion of the Chair of the Commission. Speakers are encouraged to refrain from restating previous testimony).

MINUTES

6. **Approval of minutes for Regular Meeting on October 18, 2000.**

ACTION ITEMS

7. **LAFCO 00-11 SCALLER Annexation to the Camarillo Sanitary District** - To annex approximately 1.13 acres, located on the east side of Loma Drive approximately 530 feet north of Aloha Street and 1,700 feet north of Las Posas Road, to the Camarillo Sanitary District in order to provide sanitary sewer service to three existing single-family residences; 400, 416 and 432 Loma Drive.

RECOMMENDATION: Approval

8. **LAFCO 00-12 DAVIS Annexation to the Ojai Valley Sanitary District** - To annex approximately .68 acres to the Ojai Valley Sanitary District, located at 500 and 495 Burnham Road and 184 Rockway Road in Oak View, in order to provide sanitary sewer service to existing and proposed residences.

RECOMMENDATION: Approval

9. **LAFCO 00-13 LYON Annexation to the Ojai Valley Sanitary District** - To annex approximately .68 acres in order to provide sanitary services for existing single-family residences located at 1367 Nova Lane and 1340 S. Loma Drive.

RECOMMENDATION: Approval

10. **LAFCO 00-16 HAPPY CAMP GOLF COURSE Annexation to Ventura County Waterworks District No. 1** - To annex approximately 174.7 acres to Ventura County Waterworks District No. 1 in order to provide water for part of a proposed golf course. The remainder of the proposed golf course is already within the District. The site consists of part of Happy Camp Canyon Regional Park and a 5.43 acre privately owned parcel. The area is located

east of Walnut Canyon Drive, extending north from the easterly prolongation of Broadway in the Moorpark area.

RECOMMENDATION: Approval

11. **2001 MEETING CALENDAR**- Consideration of proposed 2001 LAFCO Meeting calendar

RECOMMENDATION: Approval

PUBLIC HEARING ITEMS

12. **LAFCO 99-09 MOREAU/MITCHEL Reorganization**- Annexation to the City of Thousand Oaks and Detachment from the Ventura County Resource Conservation District - A proposal to annex two parcels, approximately 4.84 acres, to the City of Thousand Oaks and to detach from the Ventura Resource Conservation District in order to receive City urban services. The area is located on the east side of West Kelly Road approximately 1,000 feet north of Lynn Road in the Thousand Oaks area.

RECOMMENDATION: Approval

13. **LAFCO 00-14S - CITY OF OXNARD Sphere of Influence Amendment Juan Soria School** - To amend the Sphere of Influence for the City of Oxnard to include approximately 14 acres in order to allow annexation to the City of Oxnard for the development of an elementary school. The site is located between the easterly extensions of Emerson Avenue and Gershwin Place immediately east of the existing Lemonwood neighborhood in the Oxnard area.

RECOMMENDATION: Denial

14. **LAFCO 00-14 - JUAN SORIA Reorganization**- Annexation to the City of Oxnard, Detachment from the Ventura County Resource Conservation District and Detachment from the Ventura County Fire Protection District. To annex approximately 14 acres to the City of Oxnard for the development of an elementary school. The site is located between the easterly extensions of Emerson Avenue and Gershwin Place immediately east of the existing Lemonwood neighborhood in the Oxnard area.

RECOMMENDATION: Denial

15. **LAFCO 00-15S CALLEGUAS MUNICIPAL WATER DISTRICT Sphere of Influence Amendment - Juan Soria School** - To amend the Sphere of Influence for Calleguas Municipal Water District to include approximately 14 acres in order to allow annexation to the District for the development of an elementary school. The site is located between the easterly extensions of Emerson Avenue and Gershwin Place immediately east of the existing Lemonwood neighborhood in the Oxnard area.

RECOMMENDATION: Denial

16. **LAFCO 00-15 - CALLEGUAS MUNICIPAL WATER DISTRICT - Juan Soria School Annexation** - To annex approximately 14 acres to the Calleguas Municipal Water District in order to provide water for the development of an elementary school. The site is located between the easterly extensions of Emerson Avenue and Gershwin Place immediately east of existing Lemonwood neighborhood in the Oxnard Area.

RECOMMENDATION: Denial

INFORMATIONAL ITEMS

17. **Executive Officer Report**

COMMISSIONER'S COMMENTS

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the LAFCO office (805) 654-2576. Notification 48 hours prior to the meeting will enable LAFCO to make reasonable arrangements to ensure accessibility to this meeting.

The next regularly scheduled meeting is on January 17, 2001



STAFF REPORT
November 15, 2000

- PROJECT:** LAFCO 00-14 – Juan Soria School Reorganization; Annexation to the City of Oxnard, Detachment from the Ventura County Fire Protection District and Detachment from the Ventura County Resource Conservation District
- PROPONENT:** City of Oxnard, by resolution
- SIZE:** Approximately 14 acres gross
- LOCATION:** The site is located at the easterly terminus of Emerson Avenue and the easterly terminus of Gershwin Place, immediately east of the existing Lemonwood neighborhood in the Oxnard area.
- ASSESSOR'S PARCELS:** A portion of Assessor's Parcel No. 220-0-030-025
- PURPOSE:** This proposal would provide a site for the proposed Juan Soria public elementary school (grade K-6)
- NOTICE:** This matter has been noticed as a public hearing in accordance with the requirements of the Cortese-Knox Local Government Reorganization Act of 1985.

GENERAL ANALYSIS:

1. Land Use and Zoning – Present and Future:

The site is presently vacant and in use as agriculture (sod farming).

Surrounding land uses are/include:

- North: agricultural
- South: agricultural
- East: agricultural
- West: residential

COMMISSIONERS AND STAFF:

COUNTY: Kathy Long Judy Mikels Frank Schillo, Alternate	CITY: Robin Sullivan, Chair James L. Monahan John Zaragoza, Alternate	PUBLIC: Louis Cunningham Kenneth M. Hess, Alternate	SPECIAL DISTRICT John Rush, Vice Chair Jack Curtis F W (Dick) Richardson, Alternate
EXECUTIVE OFFICER: Everett Millais	LEGAL COUNSEL: Noel Klebaum	CLERK TO THE COMMISSION: Debbie Schubert	

Existing zoning is County A-E (Agricultural Exclusive).

Approved zoning upon annexation is City C-R (Community Reserve).

Surrounding zoning is:

North: County A-E

South: County A-E

East: County A-E

West: City R-1 (single family residential)

The proposed school use is not compatible with the existing County zoning, but would be compatible with the proposed City zoning, upon annexation.

2. Conformity with Plans:

The site is currently not within the City's Sphere of Influence, but a companion proposal to amend the City of Oxnard's Sphere of Influence is pending.

The site is within the Oxnard/Camarillo Greenbelt. The proposal is inconsistent with provisions of the Greenbelt. Neither the City or the School District has taken any steps to amend the Greenbelt prior to filing this application.

The site was outside the CURB (City Urban Restriction Boundary) for the City of Oxnard. The City's CURB ordinance, however, allows the City Council to amend the CURB boundary for school uses without a citywide election. The Oxnard City Council, as a part of the actions taken in approving this project, amended the CURB boundary to include this site.

The County General Plan designation is Agriculture.

The City General Plan designates the site for school uses.

Surrounding General Plan designations are:

North: Agriculture (County)

South: Agriculture (County)

East: Agriculture (County)

West: Low Density Residential (City)

The proposed use is not in conformance with the County General Plan, but is in conformance with the City General Plan.

3. Topography, Natural Features and Drainage Basins:

The topography of the site and surrounding area is generally flat.

There are no significant natural features affecting the proposal.

4. Population:

There are currently no dwelling units within the proposal area and none are proposed.

The proposed annexation is considered uninhabited.

5. Services and Controls – Need, Cost, Adequacy and Availability:

Upon annexation and development, the City has indicated that it will provide the level and range of municipal services similar to other properties in the City including, sewage disposal and treatment, drainage, law enforcement, fire protection, street lighting, recreation and parks, library, transit and other city services.

Services can be extended immediately upon annexation and development of the site.

Utility improvements can be extended from existing water and sewer mains in the vicinity of the site. Both Emerson Avenue and Gershwin Place are to be extended to the easterly boundaries of the site and connected via a new north/south street along the easterly boundary.

As a part of the Resolution initiating this reorganization action the City of Oxnard requested that LAFCO condition any approval to require the School District to:

- a. Submit a drainage study to the City Engineer for review and approval which evaluates the storm drain system serving Emerson Avenue and evaluation of run off from the agricultural areas north of Emerson Avenue. Based on the results of such a study the school district would be required to construct improvements necessary to bring Emerson Avenue's drainage condition into compliance with current City standards.
- b. Widen Emerson Avenue by 8 feet from Rose Avenue to the eastern extension of the project site.

Pursuant to Government Code Section 56844 LAFCO is given broad authority to apply terms and conditions to changes of organization or reorganization. This

Section, however, specifically prohibits LAFCOs from applying terms and conditions which, "directly regulate land use, property development, or subdivision requirements." The above noted conditions are "property development or subdivision" conditions which LAFCO cannot apply.

The City request to LAFCO concerning these two items calls into question whether or not all services can be effectively provided based on the City approvals that have occurred to date. Except for the request to LAFCO in the City's resolution, no further information has been provided. It is not known if the project can proceed if these two conditions are not met. Also, no information has been provided as to whether or not the requested widening of Emerson Avenue can occur without a further adjustment of the City's Sphere and City boundaries.

Capital improvements necessary for the development of the property will be financed by the Oxnard School District through a November 1997 school bond measure that provided for school construction.

Maintenance and operation costs for municipal services and the school will be funded from on-going state subventions and tax monies for school purposes.

6. Impact on Prime Agricultural Land, Open Space and Agriculture:

The site is presently under a short-term lease to a sod farm. The lessee also has an ownership interest in the property.

The site is considered open space as defined in Government Code Section 65560 and is prime agricultural land as defined in Government Code Section 66064.

The project site contains agricultural land defined by the Soil Conservation Service as being of statewide importance.

The site is not subject to a Land Conservation Act (Williamson Act) contract.

Cortese Knox (Government Code section 56377) requires the Commission to consider encouraging development of vacant or non prime agricultural land within a jurisdiction's existing boundaries or sphere of influence before approving proposals which will lead to the development of open space lands outside the boundaries and sphere of influence.

The adopted Commissioner's Handbook (Chapter Two, L., pages 12 & 13) states the Ventura LAFCO policies concerning agricultural and open space land conservation. These policies are attached and are discussed in the Special Analysis section of this report.

7. **Assessed Value, Tax Rates and Indebtedness:**

The proposal is presently within tax rate area 73022 (\$1.17796). Should this reorganization request be approved, a new parcel will be created and a new tax rate area assigned.

The assessed value for the total parcel is \$2,561,900 (2000-01 tax roll).

The site will be liable for payment of its share of existing indebtedness to Calleguas Municipal Water District and Metropolitan Water District if annexation to the City of Oxnard and Calleguas Municipal Water District is approved. This will be accomplished through separate annexation fees levied by Calleguas Municipal Water District and Metropolitan Water District that will pay escaped back taxes related to debt. No other bonded indebtedness costs are applicable.

8. **Environmental Impact of the Proposal:**

The Oxnard School District is the lead agency for this proposal. The School District has prepared and certified an Environmental Impact Report (EIR). This document has been distributed to members of the Commission. The environmental impact report proposes mitigation measure in the following areas to lessen any environmental impacts so that they can be considered less than significant:

- Earth Resources – liquefaction; additional geotechnical work
- Water Resources – drainage and flooding; storm water runoff and transfer of ground water pumping allocations to the City of Oxnard
- Air Quality – construction impacts; energy efficiency
- Noise – construction impacts and operational impacts from school bells
- Human Health and Safety – potential crude oil impacts and methyl bromide use
- Public Services – construction impacts relating to fire and police protection, operational impacts relating to site access, security lighting and alarm systems, and operational impacts relating to solid waste
- Aesthetics/Light and Glare – view impacts from removal of windrow trees

In addition, pursuant to Section 15093 of the CEQA Guidelines, the Oxnard School District as the lead agency adopted the attached Statement of Overriding Considerations in order to justify significant unmitigated impacts relating to:

- Project specific and cumulative loss of prime agricultural lands
- Noise; both construction noise and cumulative traffic noise along segments of Dupont Street and Emerson Avenue

- Solid waste; cumulative impacts on waste disposal facilities
- Removal of windrow trees
- Visual character; cumulative impacts associated with the development of agricultural and open space areas

LAFCO is a responsible agency under the California Environmental Quality Act (CEQA) and must also adopt a Statement of Overriding Considerations as a part of any approval.

9. Landowner and Annexing Agency Consent:

The applicant certifies that all property owners involved in this proposal have given their written consent.

10. Boundaries, Lines of Assessment and Registered Voters:

The boundaries are definite and certain.

The property is contiguous to the existing City boundary and will be within the City's Sphere of Influence if the companion application to amend the City's Sphere of Influence boundary is approved. No islands will be created as a result of this proposal.

A map sufficient for filing with the State Board of Equalization has been received from the proponent.

The property will split Assessor's Parcel No 220-0-030-025. This is proposed in order to limit the reorganization to only the proposed school site and reduce the loss of agricultural land. The proposed split of the existing larger parcel will not cause any special problems in terms of lines of assessment, but County approval for subdivision of the larger parcel is required in advance of the sale or transfer of the portion of the property that is the subject of this proposal. The County Planning Department has requested that any approval be conditioned to provide that a subdivision map be recorded or the County Planning Director approve a Subdivision Exemption request prior to the recordation of this reorganization request.

The territory is uninhabited; namely, there are fewer than 12 registered voters.

SPECIAL ANALYSIS:

- Prior Application – This application and the related applications (LAFCO 00 - 14S, LAFCO 00-15, and LAFCO 00-15S) are identical to applications submitted in the fall of 1999, but withdrawn by the proponents at the LAFCO meeting of April 19, 2000. As a part of the prior applications a significant amount of correspondence was received. A formal request has been made to include the prior correspondence as a part of the record for these new applications. This information has again been copied for distribution as a part of the Commissioner's packet and should be considered as a part of the formal record.
- Government Code Section 56377 – Government Code Section 56377 sets forth the policies and priorities that the Commission must consider in reviewing proposals which lead to the conversion of existing open space lands to non open space uses.

56377. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space lands to uses other than open-space uses, the commission shall consider all of the following policies and priorities:

(a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.

(b) Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

This proposal would convert prime agricultural land and does not promote the planned, orderly, efficient development of the area. Moreover, based on information resulting from an ad hoc committee formed by the City of Oxnard staff to review alternative sites, there are alternate sites for an elementary school either within the existing boundaries of the City of Oxnard or within the sphere of influence of the City of Oxnard. Approval of this proposal would lead to development that intrudes into prime agricultural lands and adjoins agricultural lands on three sides. The fact that alternate sites for the proposed use exist without amending sphere of influence or City boundaries, and without intruding into prime agricultural lands, is sufficient justification to deny this proposal and all related actions.

- Commissioners Handbook Policies – The Commissioners Handbook adopted in December 1999 sets forth various policies relating to agricultural and open space

land conservation (Chapter Two, L., pages 12 & 13). These portions of the Commissioners Handbook are attached. This proposal is inconsistent with several of these policies. Specifically, information has been provided to the Commission indicating that there is sufficient land within the existing boundaries of the City of Oxnard or within the City's sphere of influence that is developable for the same general use. While these alternate sites may also be prime agricultural land (as is most of the City of Oxnard), policies imply that these areas should be developed first before amending the sphere of influence or jurisdictional boundaries.

Also, based on the project EIR and further information submitted concerning this matter, it is clear that this proposal will have a significant adverse effect on the physical and economic integrity of other prime ag/open space lands. Even though utilities would not be sized to accommodate growth beyond the proposed school there are no natural buffers separating the proposed school from adjoining agricultural lands. Surrounding streets are proposed as a man-made barrier, but local streets actually encourage further encroachment and, over time, serve as poor boundaries.

- Greenbelt – The Oxnard/Camarillo Greenbelt was first established in 1982. It has subsequently been amended in 1984, 1988 and 1990. The parties to this Greenbelt are the cities of Oxnard and Camarillo and the County of Ventura. While LAFCO is not a party to any of the Greenbelt Agreements, LAFCO has "endorsed" these agreements and recognizes them as statements of local policy.

This proposal is inconsistent with the Oxnard/Camarillo Greenbelt and, thus, is also inconsistent with the County's Guidelines for Orderly Development which LAFCO has adopted. This means that the proposal is not consistent with local plans or policies.

According to information gathered by the prior LAFCO Executive Officer the Ventura LAFCO has never approved a development project for property covered by a Greenbelt Agreement.

The project EIR on page 5-2-12 states

"The General Plan indicates that land taken by the City from the Oxnard/Camarillo Greenbelt would be replaced by an equal amount into the Greenbelt. If the proposed project is annexed, the City would be required to replace the loss within the Greenbelt. This would maintain the integrity of the Greenbelt, and would be consistent with County and City policies toward the protection and maintenance of the Greenbelt systems."

Both the EIR and the application materials indicate that the City of Camarillo was consulted about the proposed project and the impacts on the Greenbelt, however, no agreement about amending the Greenbelt has been reached by any of the parties. Also, no mitigation measures dealing with amending the Greenbelt or

replacing the agricultural land that would be lost were approved. Should the Commission consider approval of this proposal and the related proposals, staff recommends that a condition be imposed requiring an amendment to the Greenbelt before the LAFCO actions are deemed final, and, consistent with the provisions of the City's General Plan, the amendment include the appropriate amount of acreage and soil type to replace the land lost from the Greenbelt.

- CEQA Issues – Part of the materials submitted by the Environmental Defense Center in response to the prior, withdrawn applications urged that the Commission require a Subsequent Environmental Impact Report concerning toxic soil contamination. A Memorandum to the Commission from the County Counsel's Office, dated April 19, 2000, which addresses this subject is attached.

The question before the Commission is whether the Environmental Impact Report adequately identified the issues of the potential toxic soil contamination and attempted to address appropriate mitigation measures and whether the material submitted by the Environmental Defense Center is substantial evidence of new information showing a significant environmental effect which was not discussed in the EIR.

The issue of the environmental concern relating to toxic soils and the use of pesticides by adjacent active farming is well documented in Section 5.8 of the Environmental Impact Report which is titled "Human Health." In addition, a Preliminary Endangerment Assessment (PEA), which is a requirement of the Department of Health Services, was conducted in an effort to determine whether current or past practices of use of hazardous substances would pose a health danger. The Mitigation Measures were adopted which were intended to address this issue. The information offered by the Environmental Defense Center does not disclose a significant effect the EIR failed to discuss.

It is the recommendation of LAFCO staff that the Commission not assume the role of lead agency and, also, not require the preparation of a Subsequent Environmental Impact Report. It is the opinion of LAFCO staff that the Environmental Impact Report adequately raises and addresses the issue of toxic soils and the continued active farming adjacent to the site.

The Commission should also understand that the technical issues raised regarding toxic soils and pesticide practices are best addressed by those with the knowledge and training in these subjects. Those agencies include the Ventura County Agricultural Commissioner, the Department of Toxic Substances Control, and the Department of Health Services. One of the reasons given by the project proponents for the withdrawal of the previous applications was to allow the School District to accomplish further work with the Department of Toxic Substances Control to gain site approval. Without such approval the school project cannot go forward. It is staff's opinion that to require further environmental analysis under the California

Environmental Quality Act at this point in the process would be duplicative and of little benefit in providing public information for decision makers.

RECOMMENDATION:

Approve the attached resolution making determinations and DENYING this proposal.

ALTERNATIVES TO THE RECOMMENDATION - ACTIONS AVAILABLE:

- A. If the Commission, following the public hearing and the review of the materials submitted, determines that further information is necessary, a motion to continue the matter should state specifically the type of information desired and specify a date certain for further consideration.
- B. If the Commission, following the public hearing and review of materials submitted with this application wishes to approve this application, a motion to approve should include:
 1. Certify that your Commission has reviewed and considered the information contained in the application regarding the Environmental Impact Report, Findings of Impact, Statement of Overriding Considerations and Mitigation Measures.
 2. Adopt the Lead Agency's Findings of Impact, Statement of Overriding Considerations and Mitigation Measures in the form adopted by the Lead Agency, and make a specific determination that the significant issues and proposed mitigation measures as adopted by the Lead Agency adequately address the project. (Sections 15091, 15093, and 15096 [h]).
 3. Direct staff to prepare and file a Notice of Determination in the same manner as a Lead Agency under Section 15075, stating that the Commission has considered the Environmental Impact Report as prepared by the Lead Agency (Section 15096[i]).
 4. Adoption of this report and all referenced materials as part of the public record.
 5. The following conditions:
 - a. The City of Oxnard shall agree in writing to defend, indemnify and hold the Ventura Local Agency Formation Commission, its commissioners and staff harmless from and against all costs, expenses, fees, claims, demands and causes of action arising from the approval of this reorganization.
 - b. That this reorganization be recorded at the same time or subsequent to the approval and recordation of either a subdivision map is recorded or the County Planning Director approves a Subdivision Exemption request to create legal lots in the City of Oxnard and the County of Ventura divided along the City's Sphere of Influence boundary.
 - c. That this reorganization shall not be final and shall not be recorded until and

unless an amendment to the Oxnard/Camarillo Greenbelt is first approved by the cities of Oxnard and Camarillo and the County of Ventura to remove the subject area from the Greenbelt. Any amendment shall include the appropriate amount of acreage and soil type to replace the land lost from the Greenbelt.

- d. That this reorganization be recorded at the same time and in conjunction with LAFCO 00-15 – Juan Soria School Annexation to the Calleguas Municipal Water District and the Metropolitan Water District of Southern California.

BY:

Everett Millais, Executive Officer



MEMORANDUM

DATE: October 2, 2000
TO: Distribution List
FROM: Debbie Schubert
Clerk to the Commission
SUBJECT: Request for Report-back:
LAFCO - 00-14 JUAN SORIA Annexation to the City of Oxnard

PROPOSAL IDENTIFICATION

LAFCO - 00-14 JUAN SORIA Annexation to the City of Oxnard - To annex approximately 14 acres to construct and operate a public elementary school (K-6) The parcel is located between the easterly extensions of Emerson Avenue and Gershwin Place, immediately east of existing Lemonwood neighborhood.

Thank you.

Report-back due: October 20, 2000

Distribution List:

Agricultural Commissioner - Earl McPhail - L#6200
Assessor - Bernie Wallen - L#1270
Elections - Bruce Bradley - L#1200
RMA, Planning - Bruce Smith - L#1740
PWA, Surveyor - Zell Rawlins - L#1600
Ventura County Resource Conservation District

DAN GOODWIN, MAI
ASSESSOR
VENTURA COUNTY



JAMES E. DODD
DEPUTY ASSESSOR
BRUCE W. GRAY
DEPUTY ASSESSOR

MEMORANDUM

October 4, 2000

TO: Local Agency Formation Commission

FROM: Assessor's Office
Mapping and Property Transfer Section

SUBJECT: LAFCO # 00-14 – Juan Soria Annexation to the City of Oxnard

1. The subject proposal packet submitted by your office is poorly assembled. It lacks the necessary certainty needed to prepare an accurate report-back. It leads to the following questions:

- 1.) What is the actual title? Is it Juan Soria as stated in your memorandum of October 2, 2000? Is it Juan Laguna Soria School as stated in the application? Or is it Juan Soria School Reorganization as stated on the map?
- 2.) Why wasn't a legal description attached for review?
- 3.) Why wasn't a detachment from Ventura County Fire Protection part of the action?
- 4.) Why wasn't a detachment from Ventura County Resource Conservation part of the action?
- 5.) Is the annexation to Calleguas Municipal Water District part of the action as the map title indicates?
- 6.) Why is a Sphere of Influence included in the action?

Therefore, we are returning it to your office for revision. Please contact our office should you have any questions.

RECEIVED

OCT 05 2000

LAFCO

COUNTY OF VENTURA
ELECTIONS

MEMORANDUM

DATE: February 2, 2001

TO: Ventura County Agency Formation Commission
Executive Officer

FROM: Helen Smith
Ventura County Elections Division

SUBJECT: LAFCO 00-14 JUAN SORIA ANNEXATION TO THE CITY OF OXNARD -
JUAN SORIA AMENDMENT TO SPHERE OF INFLUENCE-CITY OF OXNARD

VOTING PRECINCT(S): OCEAN VIEW #506

APPROX. NO. OF VOTERS: ZERO VOTERS

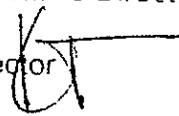
REMARKS:

RESOURCE MANAGEMENT AGENCY

county of ventura

Planning Division

Keith A. Turner
Director

DATE: October 19, 2000
TO: Everett Millais, LAFCO Executive Director
FROM: Keith Turner, Planning Director 
SUBJECT: LAFCO 00-14 – JUAN SORIA Annexation to the City of Oxnard
LAFCO 00-14s – OXNARD Sphere of Influence amendment

We have reviewed the questionnaires regarding the above item and have the following comments:

Annexation Item 3 – The subject property is a portion of APN 220-0-030-025, however, that APN is not a legally created parcel. APNs 220-0-030-025 and 220-0-030-045 together constitute the parent, legal parcel

Annexation Item 6E – We note that, although the City of Camarillo has been consulted regarding a possible amendment to the Oxnard/Camarillo Greenbelt, to our knowledge the City Council has not taken any action to approve the amendment. In addition, the County Board of Supervisors is a signatory of the Oxnard/Camarillo Greenbelt. Neither the City of Oxnard nor the Oxnard Elementary School Board has requested that Board of Supervisors approve any amendment to that greenbelt agreement to accommodate the development of the site for an elementary school. As such, the subject annexation is inconsistent with the greenbelt agreement and, as a matter of policy, is opposed by the County of Ventura. Nonetheless, if the subject annexation is approved by LAFCO we request that it be conditioned to require, prior to recordation, the approval of the Board of Supervisors, the Camarillo City Council, and the Oxnard City Council of an amendment to the Oxnard/Camarillo Greenbelt.

Annexation Item 12B – As noted in the FEIR the property owner must apply to the County for subdivision approval in advance of the sale or transfer of the school site, which is a portion of the parent parcel (APNs 220-0-030-025 and 220-0-030-045 combined). Of the two lots to be created, the "school" lot is the subject of the annexation request, and the remainder parcel will remain in the unincorporated area. If the subject annexation is approved by LAFCO, we recommend that the annexation not be recorded until either a subdivision map is recorded or the County Planning Director approves a Subdivision Exemption request.

c:\my documents\smithb\lafco\laf0014.doc

Sphere Item 5A – Section 65560.b.2 defines open space as including agricultural land, therefore the answer should be "yes".

Sphere Item 6D – see comments from the County Agricultural Commissioners Office and Agricultural Policy Advisory Committee.

Sphere Item 6F – see comments from the Agricultural Commissioner's Office.

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OCT 31 2000

LAFCO

County of Ventura
Survey Engineering
Engineering Services Division
Water Resources and Engineering Department
Public Works Agency

MEMORANDUM

To: LAFCO
Everett Millais

Date: Oct. 23, 2000

From: Zell Rawlins (ZR)
Survey Engineer

Reference No.: 00-14

Subject: JUAN SORIA REORGANIZATION

The proposal has been reviewed and found to be definite, certain and contiguous to the existing City boundary. The proposal is acceptable for recording. Please see that the attached legal descriptions and maps are used for recordation.

RECEIVED
OCT 23 2000
LAFCO

Certificate of Publication

Ad No. 202351

Matter of Publication of:

Notice of Hearing

State of California)
(§
County of Ventura)

I, Sharon K. Palmer, hereby certify that the Ventura County Star has been adjudged a newspaper of general circulation by the Superior Court of California, County of Ventura within the provisions of the Government Code of the State of California, printed and published in the City of San Buenaventura, County of Ventura, State of California; that I am the principal clerk of the printer of said paper; that the annexed clipping is a true printed copy and publishing in said newspaper on the following dates to wit:

November 1, 2000

I, certify under penalty of perjury, that the foregoing is true and correct.

Dated this 1st day of November 2000, in San Buenaventura, California.

(Signature)
skp

VENTURA LOCAL AGENCY FORMATION COMMISSION

VENTURA LOCAL AGENCY FORMATION COMMISSION

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the following matters will be heard by the Ventura Local Agency Formation Commission on **WEDNESDAY, November 15, 2000 at 9:00 a.m.** in the Board of Supervisors' Hearing Room, Main Plaza, Administration Building, County Government Center, 800 South Victoria Avenue, Ventura, CA 93009.

- 1. LAFCO 99-09 - City of Thousand Oaks - Marcus Mitchell Reorganization, Annexation No. 156 - Proposal to annex to the City of Thousand Oaks in order to receive City urban services and to concurrently detach from the Ventura Resource Conservation District. The annexation would include parcels: numbers 658-0-050-720 - located at 2641 West Kelly Road; 658-0-050-035 - located at 2652 West Kelley Road; 658-0-050-730 - and 658-0-050-585 - a portion of West Kelly Road, a private road.
- 2. LAFCO 00-145 - City of Oxnard - Sphere of Influence Amendment - Juan Sorla School - This proposal would amend the Sphere of Influence of the City of Oxnard to include an additional approximate 14 acres. The site is located at the eastern extensions of Emerson Avenue and Gershwin Place, in the Oxnard area.

3. LAFCO 00-14 - Juan Sorla School Reorganization - Annexation to the City of Oxnard; Detachment from the Ventura County Fire Protection District, and Detachment from the Ventura County Resource Conservation District - This proposal would add an additional approximate 14 acres to the City of Oxnard. The site is located at the eastern extensions of Emerson Avenue and Gershwin Place, in the Oxnard area.

4. LAFCO 00-155 - Colleguas Municipal Water District - Sphere of Influence Amendment - Juan Sorla School - This proposal would amend the Sphere of Influence of the Colleguas Municipal Water District to include an additional approximate 14 acres. The site is located at the eastern extensions of Emerson Avenue and Gershwin Place, in the Oxnard area.

5. LAFCO 00-15 - Annexation No. 44 (Juan Sorla School) to the Colleguas Municipal Water District and the Metropolitan Water District of Southern California - This proposal would add an additional approximate 14 acres to the Colleguas Municipal Water District. The site is located at the eastern extensions of Emerson Avenue and Gershwin Place, in the Oxnard area.

Dated this 30th day of October, 2000

Everett Mittals
Executive Officer
Publish: Nov 1, 2000 Ad
No.VC202351

RECEIVED

NOV 07 2000

LAFCO

SOUTHEAST QUADRANT

SFPD 4.0 School Site Field Reviews



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura
Site Identification: Southeast Quadrant: Site 15 SFP Application No.: 50/72538-00-
Location (cross streets): Ventura Road, Channel Islands Boulevard, Manzanita Drive, and Casa San Carlos Lane

Master Plan Capacity 630 Site Size: Gross acres 11 Planned Joint Use: Land/Park
MTYRE _____ Net acres _____ Buildings
Grade level K-6 CDE Recommended acres 9.90

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Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: See Comments and Conditions, page two.
Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

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Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: _____

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Topography of site: Level Rolling Sloping Steep Other: _____
Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident.
Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: A commercial shopping center and gas station
Street improvements: (y = yes n = no p = proposed)
Sidewalk Yes Curb & gutter Yes Street paving 3 Street lighting 3 Fire Hydrant Yes
Comment: All major infrastructure is present and operating.

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Funding: State Local Developer Other Estimated Land Value per acre _____
Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No
Is condemnation required? Yes No Unknown
Comment: It is assumed, but not known for sure, that condemnation and relocation will be required.

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Ranking: (1=high and 5 = low)
Ranking of this Site 3 Number of sites evaluated 6 Relative ranking of this site 1
 The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site, though near Kamala and McKinna Schools, is in the area of greatest need for schools in the School District at this time.

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 15, in the southeast quadrant of the school district, located on Channel Islands Boulevard between Ventura Road and Manzanita Drive, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

This site is located near McKinna and Kamala Schools, but is in the corridor of the city between Ventura Road and Oxnard Boulevard-Saviers Road of greatest need for new schools. It is also situated deep within an established residential area so that it would be a neighborhood school. It is adjacent to Ventura Road on the west and Channel Islands Boulevard on the south, both fast, busy, noisy, arterial roads. If students from west of Ventura Road will attend this school, then the installation of traffic lights or similar mitigation on Ventura Road will be necessary. Sound attenuation will need to be an architectural design element. A Union 76 gas station is on the property, which may require environmental cleanup. *Eminent domain* court proceedings and relocation of businesses can be time consuming and costly.

Conditions:

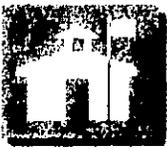
Completion of requirements listed on form SFPD 4.01.

Students are to attend this campus from across Ventura Road, a traffic hazard study and a safe routes to school plan will be required.

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements, including power substations, within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

Site Information	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Southeast Quadrant: Site 14</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Laurel Street between C Street and Saviers Road</u>
Master Plan Capacity	Master Plan Capacity <u>630</u> Site Size: Gross acres <u>10</u> Planned Joint Use: Land/Park <input type="checkbox"/>
	MTYRE _____ Net acres _____ Buildings <input type="checkbox"/>
	Grade level <u>K-6</u> CDE Recommended acres <u>9.90</u>
Safety	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input type="checkbox"/> Flood <input type="checkbox"/> Railroad <input type="checkbox"/> Noise <input type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Site	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>adj</u> Water <u>adj</u> Sewer <u>adj</u> Electricity <u>adj</u> Storm Drain _____ Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: _____
	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
Development	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident.</u>
	Are there existing structures on the site which need to be removed or demolished? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comment: <u>School buildings of a private high school, believed not to comply with the Field Act</u>
Street	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>1</u> Curb & gutter <u>1</u> Street paving <u>3</u> Street lighting <u>2</u> Fire Hydrant <u>2</u> Comment: <u>All major infrastructure is present and operating.</u>
	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
Finance	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Comment: <u>It is unknown whether the current owner would be receptive to purchase or under what conditions.</u>
Ranking	Ranking: (1=high and 5=low) Ranking of this Site <u>3</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>2</u>
	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site, though near Kamala, Elm Street, and Harrington Schools, is in the area of greatest need for schools in the School District at this time.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 14, in the southeast quadrant of the school district, located on Laurel Street between C Street and Saviers Road, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

This site is located near Kamala, Elm Street, and Harrington Schools, but is in the corridor of the city between Ventura Road and Oxnard Boulevard-Saviers Road of greatest need for new schools. It is also situated deep within an established residential area so that it would be a neighborhood school. It is adjacent to Saviers Road on the east, a fast, busy, noisy, arterial road. Sound attenuation should be an architectural design element. Groundwater remediation is taking place south of the property in the parking lot of the Center Point Mall. This property could be one of the easiest to acquire or one of the most difficult, depending on the interest and plans of the present owners.

Conditions:

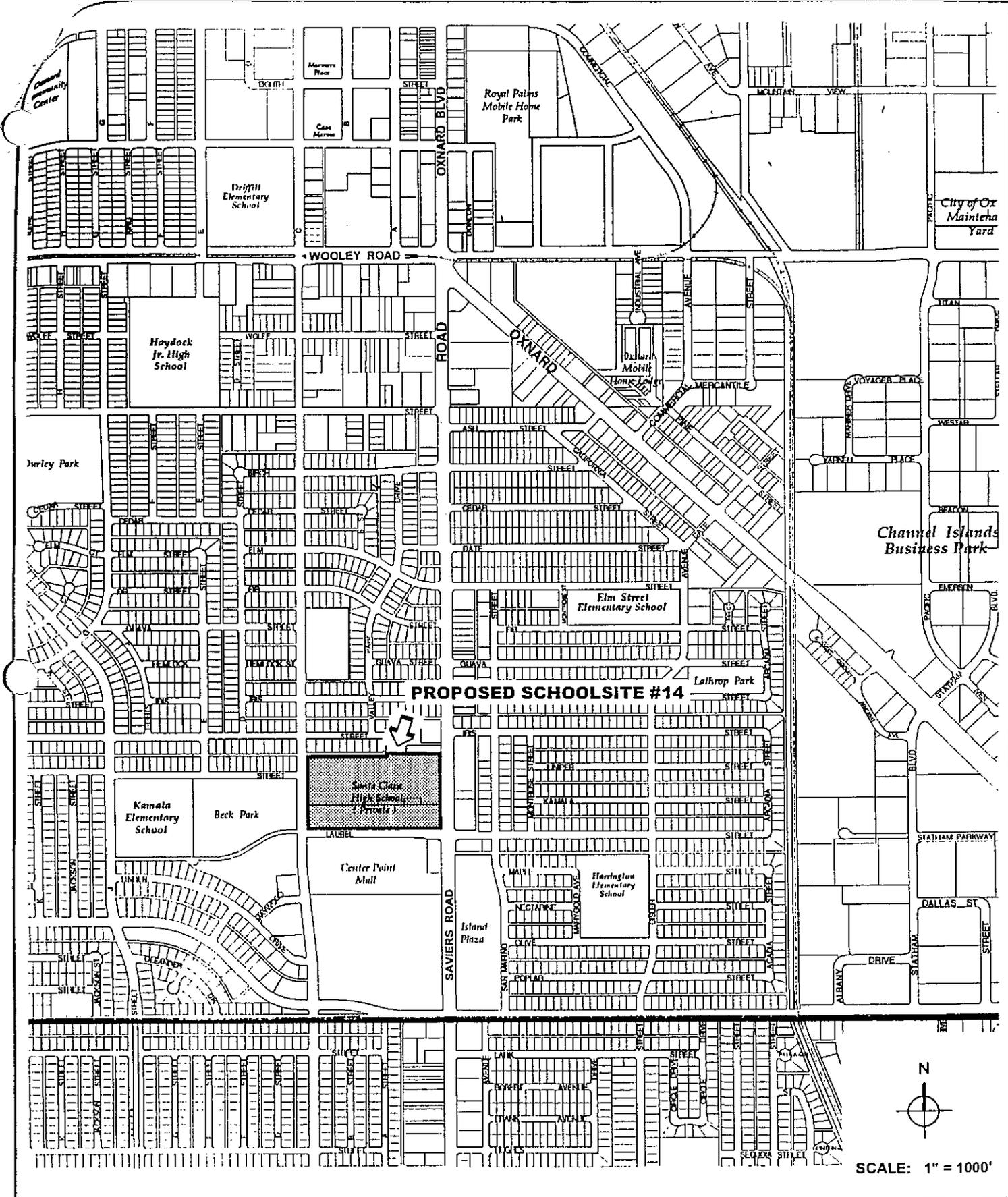
Completion of requirements listed on form SFPD 4.01.

If students are to attend this campus from across Saviers Road, a traffic hazard study and a safe routes to school plan will be required.

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements, including power substations, within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



PROPOSED SCHOOLSITE #14

Santa Clara High School

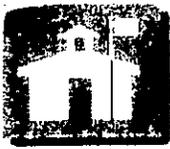
Kamala Elementary School

Elm Street Elementary School

OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #14

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

S i t e I n f o r m a t i o n	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Southeast Quadrant: Site 19</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Rose Avenue between Emerson Avenue and Wooley Road</u>
M a s t e r P l a n C a p a c i t y	Master Plan Capacity <u>630</u> Site Size: Gross acres <u>53</u> Planned Joint Use: Land/Park <input type="checkbox"/>
	MTYRE _____ Net acres <u>9.9</u> Buildings <input type="checkbox"/>
	Grade level <u>K-6</u> CDE Recommended acres <u>9.90</u>
S a f e t y	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Railroad <input type="checkbox"/> Noise <input type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input checked="" type="checkbox"/> Comment: <u>Oil field area. See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
S p e c i a l N e e d s	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>adj</u> Water <u>adj</u> Sewer <u>adj</u> Electricity <u>adj</u> Storm Drain _____
	Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: _____
D e v e l o p m e n t	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident, although drainage is an important consideration at this site.</u>
	Are there existing structures on the site which need to be removed or demolished? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comment: _____
F u n d i n g	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
I s c o n d e m n a t i o n r e q u i r e d	Is condemnation required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Comment: <u>The owner of the property is thought to be willing to sell.</u>
	Ranking: (1=high and 5 = low) Ranking of this Site <u>3</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>3</u>
R e c o m m e n d a t i o n	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.
	<input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site, though near Lemonwood School, is in an area of the community that needs another school. Soria School is planned for this section of the school district. If it is constructed as planned, Site 19 would probably not be needed.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 19, in the southeast quadrant of the school district, located off Rose Avenue between Emerson Avenue and Wooley Road, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

This site is located near Lemonwood School and the new Soria School site. If the Soria School is built as planned, this site will likely fall out of consideration as a candidate elementary site. The area may need a new middle school one day. West and northwest across Rose Avenue is the beginning of a major industrial area of Oxnard. North across Wooley and east is agricultural land that has not been annexed by the city and therefore will not likely become residential areas in the near future. The site itself is just outside the city limits. Only south across Emerson and east of Rose Avenue is there significant residential development. Positioned on Emerson it would be a neighborhood school. Rose Avenue, already a fast, busy, noisy, arterial road, is planned for expansion to six lanes. The school should be set back a suitable distance from the Rose Avenue easement for safety, and sound attenuation should be an architectural design element.

As a cultivated agricultural site, on which residual pesticides are likely to exist, it is a near certainty that a Preliminary Environmental Assessment, conducted under the auspices of the Department of Toxic Substances Control, will be required. This is also said to be an oil field area. And to the extent that the surrounding land continues in agricultural production, pesticide drift could be an issue, even though those applying pesticides are obligated to control their travel. If a wide agricultural buffer is needed on the east of the property, and a significant buffer is needed from Rose Avenue on the west, the site could become too long and narrow to be viable. The District will want to take into consideration the likelihood and timing of residential construction east of Rose Avenue, in terms of environmental concerns, off-site and utility extension costs, and future middle school needs.

Conditions:

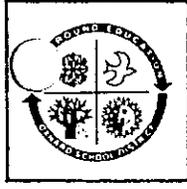
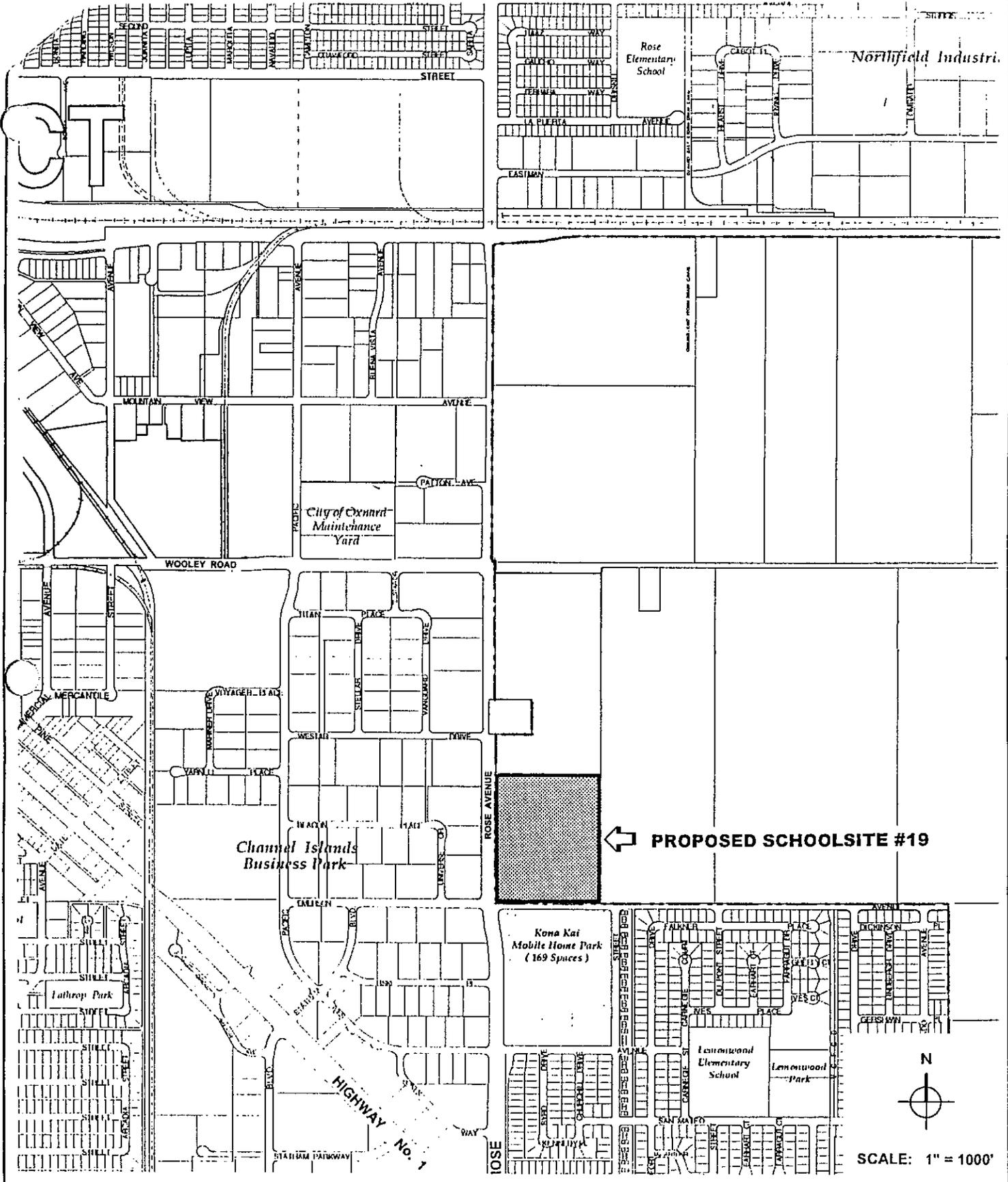
Completion of requirements listed on form SFPD 4.01.

If students are to attend this campus from across Rose Avenue, a traffic hazard study and a safe routes to school plan will be required.

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements, including power substations, within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



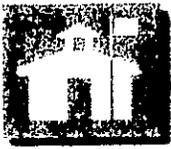
OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #19

DATE:
 02 JAN 01

SCALE:
 1" = 1000'

DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: <u>George Shaw</u>
Date of Review: <u>12/15/00</u>

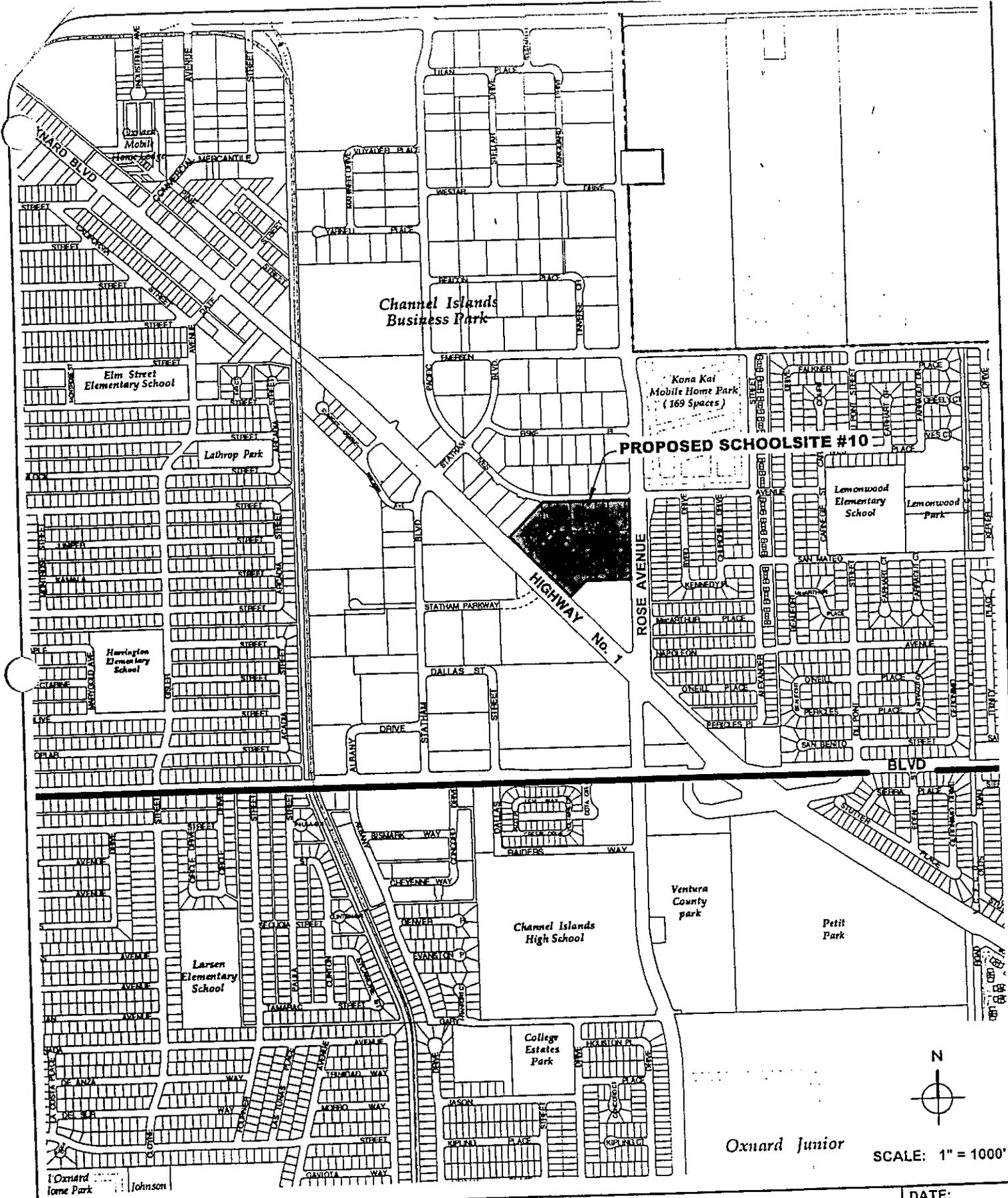
Site Information	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Southeast Quadrant: Site 10</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Rose Avenue between Highway 1 and Ives Avenue</u>
Master Plan Capacity	MTYRE _____ Grade level <u>K-6</u>
	Site Size: Gross acres <u>12</u> Net acres <u>9.9</u> CDE Recommended acres <u>9.90</u>
	Planned Joint Use: Land/Park <input type="checkbox"/> Buildings <input type="checkbox"/>
Safety	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Railroad <input type="checkbox"/> Noise <input checked="" type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Comment: <u>Zoned industrial and light manufacturing. See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Site Development	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>adj</u> Water <u>adj</u> Sewer <u>adj</u> Electricity <u>adj</u> Storm Drain _____ Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: _____
	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
Funding	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident.</u>
	Are there existing structures on the site which need to be removed or demolished? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comment: <u>A new commercial business office building at one corner might stay for district administrative uses.</u>
	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>No</u> Curb & gutter <u>No</u> Street paving <u>3</u> Street lighting _____ Fire Hydrant <u>2</u> Comment: <u>Rose Avenue is scheduled to be a six-lane arterial road in the future.</u>
Finance	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Comment: _____
Ranking	Ranking: (1=high and 5 = low) Ranking of this Site <u>5</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>4</u>
	<input type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input checked="" type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site is poorly located at the intersection of Highway 1 and Rose Avenue in a developing industrial zone. It would never be a neighborhood school unless connected by pedestrian bridge as it is across busy and expanding Rose Avenue from the homes.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 10, in the southeast quadrant of the school district, is located in a developing industrial zone that is not yet established. Moreover, it is at the junction of two major transportation and utility corridors. The activities and events likely to occur around the schoolsite over time could well be inconsistent with the goals of the School District to keep its students and teachers safe from environmental hazards. The School District could find it difficult if not impossible to prevent industrial enterprises from entering the area whose interests, processes and manufacturing might be injurious to the school. Rose Avenue, already a fast, busy, noisy, arterial road, is planned for expansion to six lanes. This site is across Rose Avenue from the residential areas it would seek to serve, though a pedestrian bridge could be constructed to connect the two. Busing would likely be a permanent feature of school life, even with a pedestrian overcrossing. Isolated by industry and major, high-speed roadways, a school here would never really be a neighborhood school. The site's positive qualities are insufficient to make it more than a marginally satisfactory elementary school and it may well not be ultimately approvable. The Department of Education advises the School District against proceeding with this site.



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #10

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

School Site Field Review

Consultant: George Shaw

Date of Review: 3/1/01

Oxnard Elementary

County: Ventura

Location: Southeast Quadrant: Site 9

SFP Application No.: 50/72538-00-

Location (cross streets): Highway 1, Rose Avenue, Channel Islands Boulevard

Master Plan Capacity 630 Site Size: Gross acres 20 Planned Joint Use: Land/Park
 MTYRE _____ Net acres _____ Buildings
 Grade level K-6 CDE Recommended acres 9.90

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
 Gas transmission lines Electric transmission lines Other
 Comment: Abandoned and active oil wells. Please see Comments, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
 Gas adj _____ Water adj _____ Sewer adj _____ Electricity adj _____ Storm Drain _____
 Special needs: Well Septic Other: _____

Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident, though environmental cleanup could be challenging.

Are there existing structures on the site which need to be removed or demolished? Yes No
 Comment: _____

Street improvements: (y = yes n = no p = proposed)
 Sidewalk 1 Curb & gutter 2 Street paving 3 Street lighting N Fire Hydrant 1
 Comment: Rose Avenue is scheduled to be a six-lane arterial road in the future; Channel Islands and Highway 1 are 4.

Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

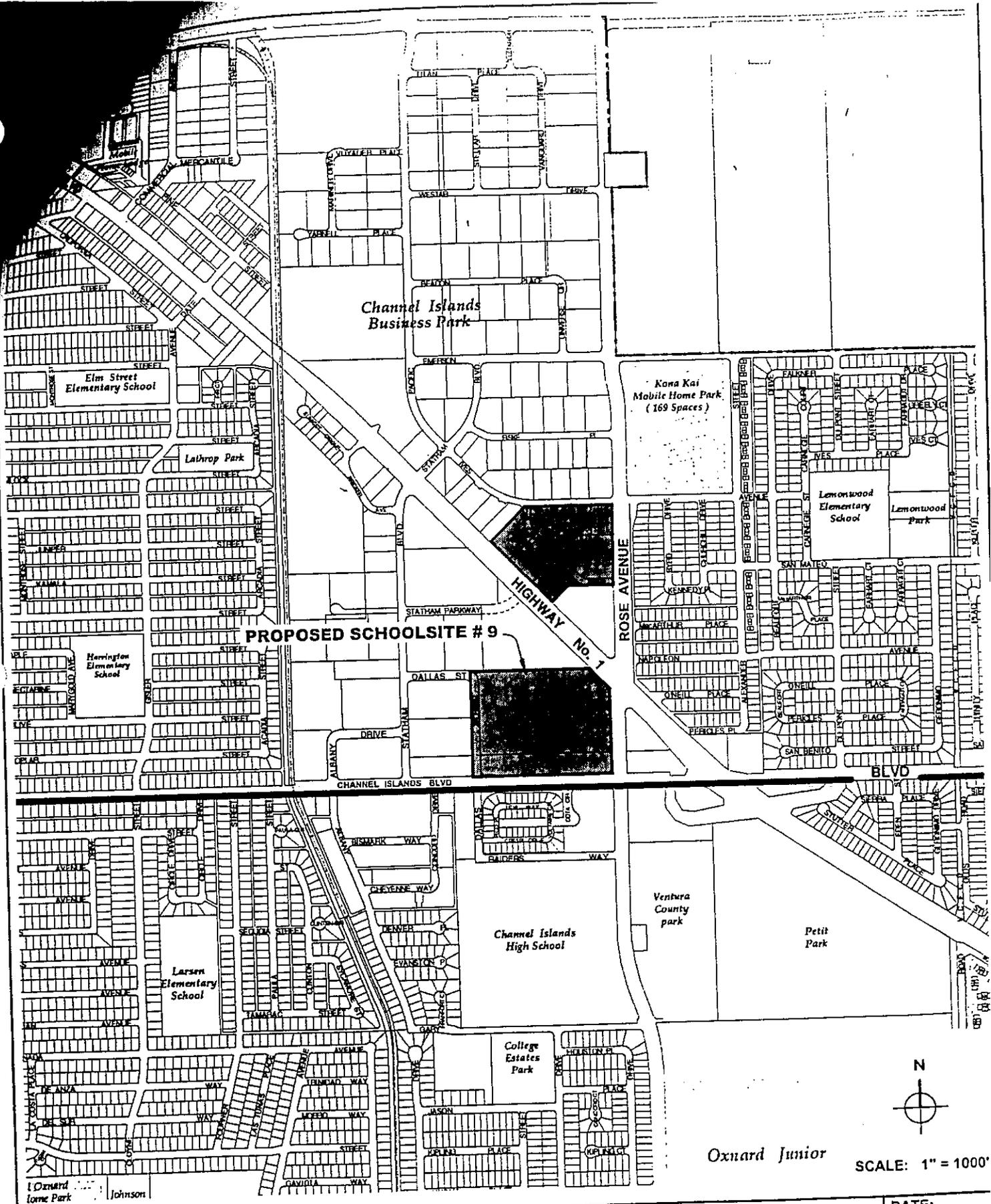
Is condemnation required? Yes No Unknown
 Comment: The property has been for sale, but may have transferred ownership.

Ranking: (1=high and 5 = low)
 Ranking of this Site 5 Number of sites evaluated 6 Relative ranking of this site 5

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**

The CDE recommends that the district no longer pursue acquiring this site.

Comment: This site is poorly located at the intersection of Highway 1, Rose Avenue and Channel Islands Boulevard, all high-speed, four-lane arterial roads. A school here would never be a neighborhood school. Virtually all students would require busing.



Oxnard Junior SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE # 9

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw
Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura
Site Identification: Southeast Quadrant: Site 16 SFP Application No.: 50/72538-00-
Location (cross streets): Wooley Road between Oxnard Boulevard and Industrial Avenue

Master Plan Capacity 630 Site Size: Gross acres 11.6 Planned Joint Use: Land/Park
MTYRE _____ Net acres _____ Buildings
Grade level K-6 CDE Recommended acres 9.90

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: Industrial area. See Comments and Conditions, page two.
Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: _____
Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident.
Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: The site is a former drive-in movie theater.

Street improvements: (y = yes n = no p = proposed)
Sidewalk No Curb & gutter No Street paving I Street lighting _____ Fire Hydrant _____
Comment: The site is bounded by an alley on the southwest and west connecting to Wooley Road.

Funding: State Local Developer Other Estimated Land Value per acre _____
Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No
Is condemnation required? Yes No Unknown
Comment: The property is on the market for sale.

Ranking: (1=high and 5 = low)
Ranking of this Site 6 Number of sites evaluated 6 Relative ranking of this site 6
 The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site is in a heavily industrialized section of Oxnard, surrounded by all the environmental hazards schools should avoid.

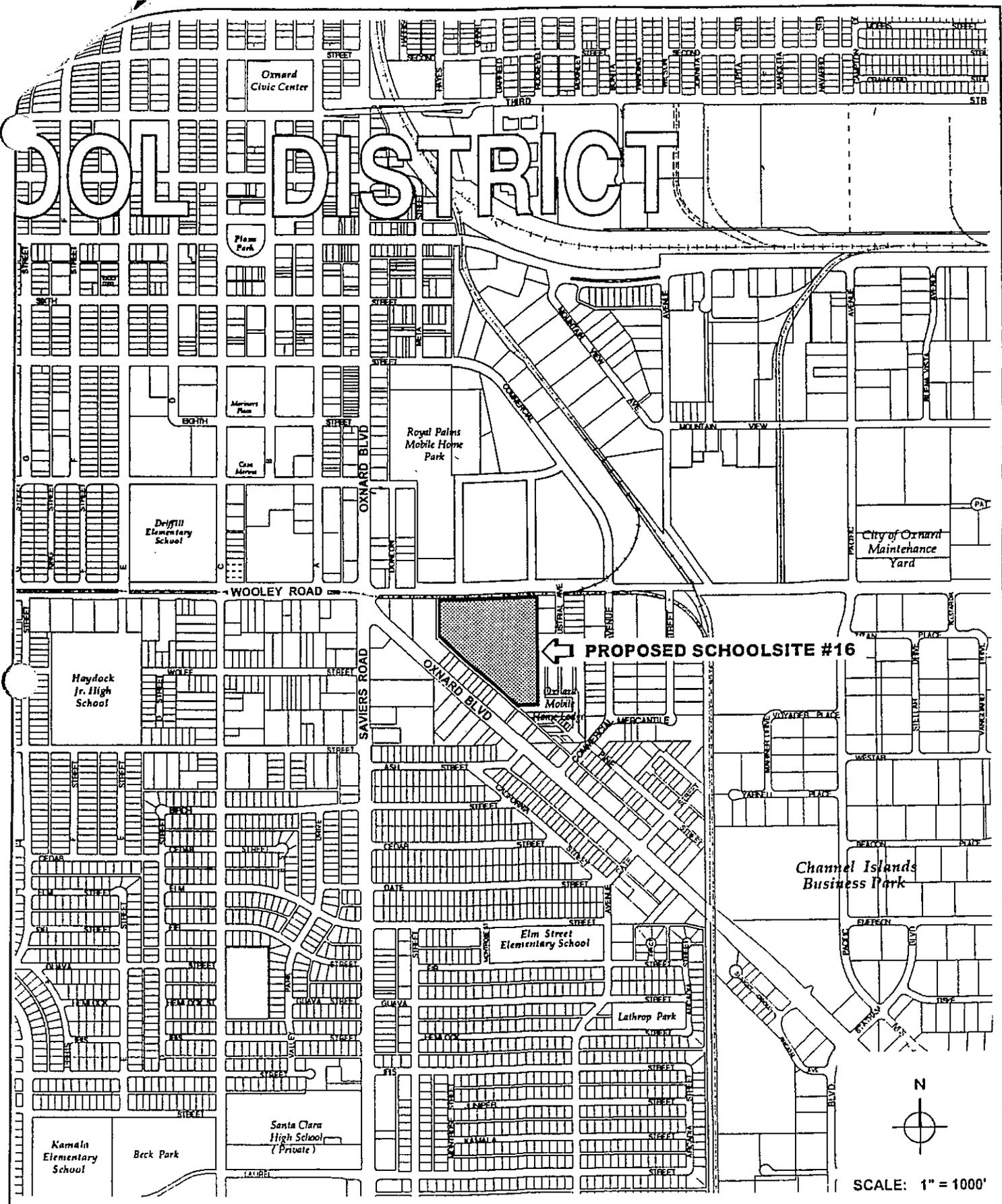
SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 16, in the southeast quadrant of the school district, is located in an old industrial zone. A former sugarbeet factory in which red lead was used in processing is directly north of the site. A pesticide mixing facility is northeast 1/3 mile. A chrome plating facility and a show girls bar are among the businesses located east of the site 1000 feet. Railroad tracks are within 1/4 mile and high-voltage powerlines run in Wooley Road. Wooley Road and Oxnard Boulevard are high-speed arterial roads. The large majority of students who would be served by a school in this location would have to cross these transportation corridors unless they were bused. Busing would be a permanent feature of life for a school here. The school would not be neighborhood school for most of the student population. Driffill and Elm Street Schools are each 1/3 mile away. The area, other than the industries, is economically and socially depressed. The activities and events likely to occur around the schoolsite over time could well be inconsistent with the goals of the School District to keep its students and teachers safe from environmental hazards. Apart from the size and availability of the site, it is difficult to find any positive qualities that make this property suitable for a school. The site's negative qualities cannot in all likelihood be mitigated sufficiently to make it consistent with Title 5 and to obtain approval. The Department of Education advises the School District against proceeding with this site.

GOLD DISTRICT



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #16

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

3/1
(map)

**Evaluation of Nineteen Candidate Schoolsites for
the Oxnard Elementary School District**

Dorothie J. Sterling, President



**School Facilities Planning Division
California Department of Education**

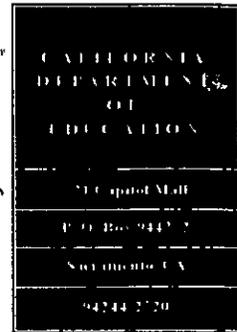
George M. Shaw

March 27, 2001

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DELAINÉ EASTIN
State Superintendent of Public Instruction



March 26, 2001

Dorothie J. Sterling, President
Board of Trustees
Oxnard Elementary School District
1051 South A Street
Oxnard, CA 93030-7492

Dear President Sterling:

The California Department of Education is pleased to present to the Governing Board of the Oxnard Elementary School District on-site field evaluations of seventeen elementary and two intermediate candidate schoolsites.

Please note that I have, in most cases, evaluated the elementary sites for 630 students in kindergarten, double session, through grade 6, with 20:1 student-teacher ratios at K-3. The 9.9 net useable acres required according to State standards for this student population would allow for the expansion of these schools up to 700 students, K-6, if or when needed. However, if the class size reduction effort is extended to grades 4-6, 10.3 net useable acres would be required for either population. I have evaluated the intermediate sites for 950 students in grades 7 and 8. The 15.0 net useable acres required for this student population would allow for expansion up to 1,050 students. If the class size reduction effort is extended to grades 7 and 8, 16.6 net useable acres would be needed. And if football and track facilities are required for the intermediate physical education programs, 21.9 acres would be necessary for this population, or 23.5 acres with 20:1 student-teacher ratios.

You will see that I have additionally grouped these evaluations by quadrants, using Ventura Road and 5th Street as the north-south and east-west axes. These quadrants are fairly large and do not necessarily correspond to any school attendance areas. This method is merely an attempt on my part to bring better order to the evaluation of numerous sites citywide and to provide you comparisons within these large neighborhoods. The School District may prefer to plan new schools using smaller planning areas. I would be pleased to re-group and re-rank candidate sites accordingly.

I believe the evaluations are self-explanatory, with maybe one exception. I was asked to give an opinion on Fremont Intermediate School as a potential site for a new elementary school. I have not, however, included a field evaluation of Fremont School for two reasons: First, Fremont is an operating school. It is not a candidate site. And because of this essential difference, a comparison with candidate sites is not apropos. Candidate sites, for instance, should have the potential to be safe; but schoolsites should *be* safe. Second, because the campus is a recognized, operating school, approval or reapproval of the site is not required except that we would require an evaluation of environmental hazards in the vicinity of the school before giving approval to construction plans. As with Ramona School's reconstruction, this would include an evaluation of air traffic safety by the

Department of Transportation and review of a Phase I Environmental Site Assessment by the Department of Toxic Substances Control. It could involve assessment of other environmental hazards, though none appeared to me when I visited the schoolsite.

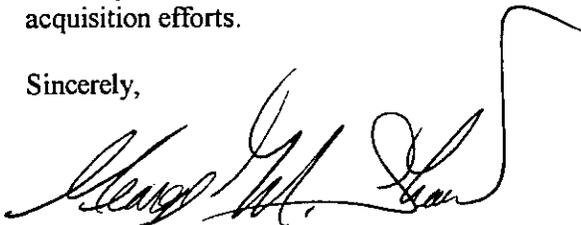
One final word is necessary on Fremont School and thoughts on taking a portion of the playfields for a new elementary school. The 7-8 grade campus is currently comprised of 25.5 acres and serves 1,130 students. This student population requires 18.1 net useable acres according to state standards, without 20:1 student-teacher ratios and without football and track. It appears, then, that the school may have a few acres on which it could build a small companion elementary school to Curren Elementary, one block away. However, given the difficulty of finding and acquiring even appropriate elementary sites in Oxnard, which are in the range of 10 to 11 acres, the School District needs to make a careful assessment of its future ability to identify and acquire intermediate school sites of 15 to 20 acres. The School District may find it prudent to reserve its capability of expanding the capacity of Fremont Intermediate in order to ensure its ability to respond to changing student population trends and to any lack of large tracts of land.

I have not completed an evaluation report for Elementary Site 17, in the Southwest quadrant. It is a long, narrow site at the intersection of busy roadways and the Edison Canal, and near the inner turning zone of Oxnard Airport. Site 4 is a large parcel on which several schoolsite configurations are possible, and these together with Site 18 give the School District several good choices.

I have not evaluated Sites 20, 21, 23, 24, 25, 26, 27, and 29 as they are all are either on or alongside the airport or in the inner turning zones of the air traffic patterns.

I am at your continued assistance should the School District require it in your site selection and acquisition efforts.

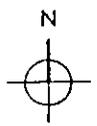
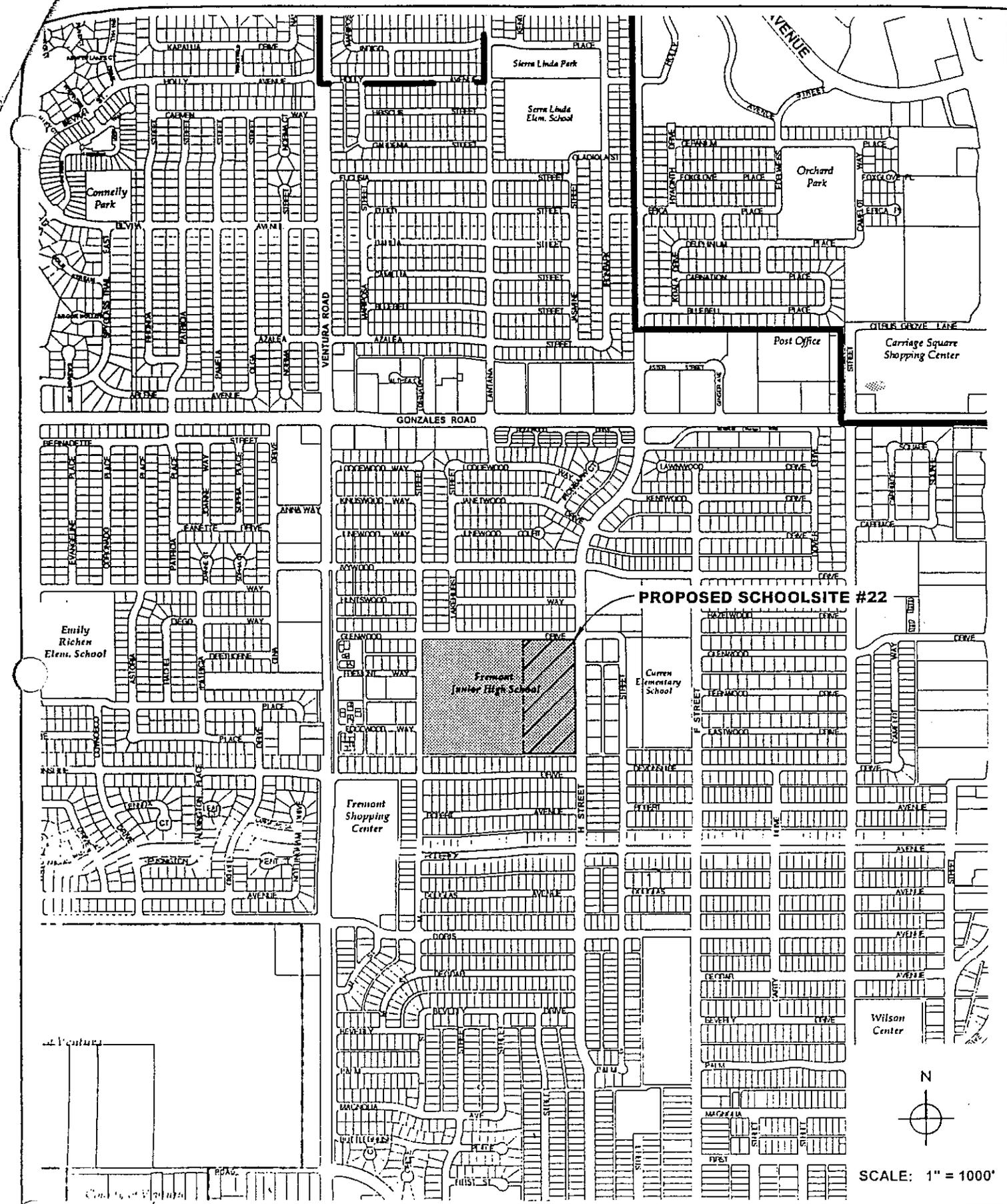
Sincerely,



George M. Shaw, Field Consultant
School Facilities Planning Division
(805) 692-9913

GMS

Enclosures



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #22

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

S i t e I n f o r m a t i o n	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Northeast Quadrant: Site 6</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Camino Del Sol and Rose Avenue</u>
M a s t e r P l a n C a p a c i t y	Master Plan Capacity <u>500</u> Site Size: Gross acres <u>7.5</u> Planned Joint Use: Land/Park <input type="checkbox"/>
	MTYRE _____ Net acres _____ Buildings <input type="checkbox"/>
	Grade level <u>K-6</u> CDE Recommended acres <u>7.10</u>
S a f e t y	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input type="checkbox"/> Flood <input type="checkbox"/> Railroad <input type="checkbox"/> Noise <input type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>Rose Avenue separates the site from Del Sol Park.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
S e D e v e l o p m e n t	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>adj</u> Water <u>adj</u> Sewer <u>adj</u> Electricity <u>adj</u> Storm Drain <u>soon</u> Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: <u>A storm drain system along Camino Del Sol is in construction.</u>
	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
D e v e l o p m e n t	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident.</u>
	Are there existing structures on the site which need to be removed or demolished? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comment: _____
F i n a n c e	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>2</u> Curb & gutter <u>2</u> Street paving <u>2</u> Street lighting <u>2</u> Fire Hydrant <u>4</u> Comment: <u>The site is in a developed residential area.</u>
	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
R a n k i n g	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Comment: <u>The property is on the market for lease.</u>
R a n k i n g	Ranking: (1=high and 5 = low) Ranking of this Site <u>2</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>1</u>
	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>The site is near Rose Elementary School, but could be paired with it. It is approvable for 500 elementary students, K-6. Multi-story construction, joint-use agreements, or educational justification may allow for more.</u>

NORTHEAST QUADRANT

SFPD 4.0 School Site Field Reviews

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 6, at the intersection of Camino Del Sol and Rose Avenue is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

This site is generally free from environmental hazards. It is located in an established residential neighborhood and would be a neighborhood school. Rose Elementary School is one long block away and could be used in tandem with it. Primary and elementary schools, for instance, for grades K-3 and 4-6, are a common arrangement and might work well here, given the proximity of the two sites and sufficient population density. Del Sol Park is directly across Rose Avenue from the schoolsite. With proper traffic mitigation, the school might be able to use the park jointly with the community under a joint-use arrangement. This could allow for a full-size elementary school on the campus. A creative physical education program or multi-story construction may also be useful in justifying more than 500 students at this school. The site is large enough to serve 700 K-3 grade students or 400 4-6 grade students, in either a K-3 and 4-6 configuration.

All in all, this site has considerable potential and environmentally is one of the best sites reviewed. The School District needs to determine whether this site will be centrally located to an elementary population of 400 to 700 students in addition to those students attending Rose Elementary.

Conditions:

Completion of requirements listed on form SFPD 4.01.

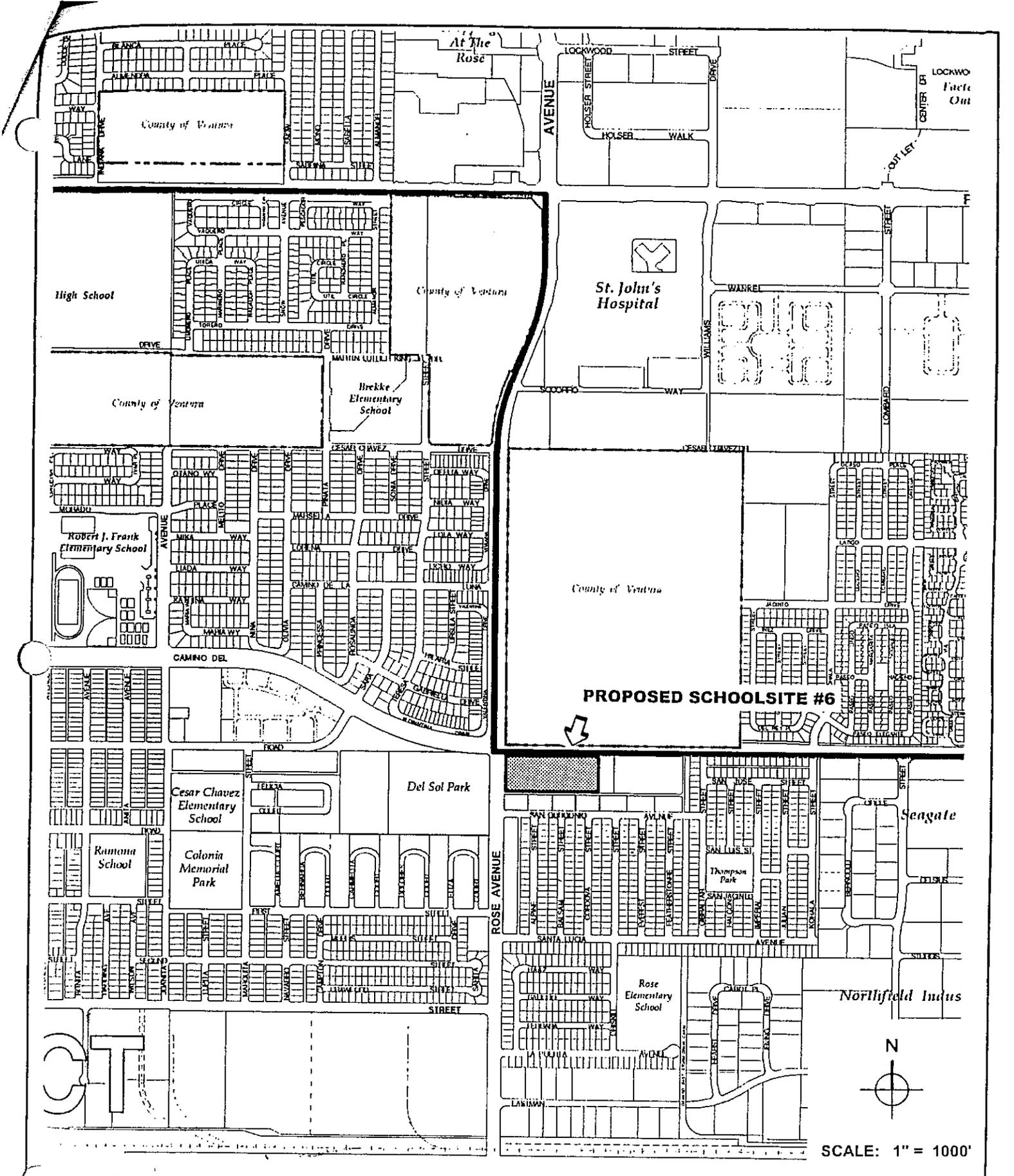
A traffic hazard study and a safe routes to school plan is required if students are to cross Rose Avenue or another arterial road.

The California Department of Transportation must evaluate this site's safety relative to airports within two air miles.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.

An educational or architectural plan or joint-use agreement demonstrating how the School District's educational program can be effectively delivered on this site if the school is to accommodate more than 500 elementary students.



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #6

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 3/1/01

Site Information	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Northeast Quadrant: Site 5</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Oxnard Boulevard between Camino del Sol and Morado Place, west of Frank Intermediate School</u>
Master Plan Capacity	Master Plan Capacity <u>630</u> Site Size: Gross acres <u>45</u> Planned Joint Use: Land/Park <input type="checkbox"/>
	MTYRE _____ Net acres _____ Buildings <input type="checkbox"/>
	Grade level <u>K-6</u> CDE Recommended acres <u>9.90</u>
Safety	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Railroad <input checked="" type="checkbox"/> Noise <input checked="" type="checkbox"/> Gas transmission lines <input checked="" type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>Please see Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Special needs	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas _____ Water _____ Sewer _____ Electricity _____ Storm Drain _____
	Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: <u>Residential infrastructure is developing in the area.</u>
Development	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>Railroad and gas transmission pipeline mitigation measures</u>
	Are there existing structures on the site which need to be removed or demolished? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comment: <u>One house</u>
Funding	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>N</u> Curb & gutter <u>N</u> Street paving <u>N</u> Street lighting <u>N</u> Fire Hydrant <u>N</u> Comment: <u>A Camino del Sol extension appears to be planned. Residential infrastructure is developing in this area.</u>
	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
Finance	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Comment: _____
Ranking	Ranking: (1=high and 5 = low) Ranking of this Site <u>2-</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>2</u>
	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>A schoolsite as far as possible from Highway 1 and the railroad tracks appears approvable and with proper investigation and mitigation of several hazards could be a safe and educationally supportive neighborhood school.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 5, just east of Frank Intermediate School, with frontage on Camino del Sol extended and Morado Place, is approvable provided all environmental hazards are adequately addressed and successfully mitigated. There are, however, several environmental hazards associated with this 45-acre site, and a 9.9-net acre schoolsite far from the Highway 1-Union Pacific Railroad corridor is strongly advised.

This large parcel is located on a busy, fast, noisy state highway. Union Pacific mainline railroad tracks run just east of Oxnard Boulevard. It is suspected that gas transmission lines are in the railroad track easement. The site is within two nautical miles of Oxnard Airport. The site is well located in a developing, new residential area. Effective mitigation of environmental hazards at this site is all-important to the viability of a school in this location and approval by the Board of Education and the Department of Education.

The school buildings should be situated far away from Oxnard Boulevard, and sound attenuation would need to be an architectural design element.

Conditions:

Completion of requirements listed on form SFPD 4.01.

A map of the attendance area for this school showing that no students will attend who live west of Oxnard Boulevard (Highway 1).

A traffic hazard study is required to address the risks of proximity to Oxnard Boulevard.

The existence of mainline railroad tracks within 1,500 feet of the site requires a railroad risk analysis pursuant to Title 5, Section 14010 (d).

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura

Site Identification: Northeast Quadrant: Site 13 SFP Application No.: 50/72538-00-

Location (cross streets): F Street and Doris Avenue

Master Plan Capacity 630 Site Size: Gross acres 10 Planned Joint Use: Land/Park

MTYRE _____ Net acres _____ Buildings

Grade level K-6 CDE Recommended acres 9.90

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise

Gas transmission lines Electric transmission lines Other

Comment: Electric transmission lines exist in the alley behind the hospital.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)

Gas adj _____ Water adj _____ Sewer adj _____ Electricity adj _____ Storm Drain _____

Special needs: Well Septic Other: All utilities are on site.

Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:

No special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No

Comment: Major demolition of a former hospital constructed with asbestos and lead would be necessary.

Street improvements: (y = yes n = no p = proposed)

Sidewalk 3 Curb & gutter 3 Street paving 3 Street lighting _____ Fire Hydrant _____

Comment: The site is in an established residential neighborhood with all infrastructure development.

Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

Is condemnation required? Yes No Unknown

Comment: The property is for sale.

Ranking: (1=high and 5 = low)

Ranking of this Site * _____ Number of sites evaluated 6 Relative ranking of this site * _____

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**

The CDE recommends that the district no longer pursue acquiring this site.

Comment: * This site would be ranked 2. and 3 overall in the northeast quadrant of the school district, except that it is located within the inner turning zone of Oxnard Airport's runway.

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 13, in the northeast quadrant of the school district, is unfortunately located within the "inner turning zone" of Oxnard Airport's runway. This site in most other ways meets the criteria for schoolsites, and indeed has excellent potential as a schoolsite except for its location relative to the airport. It is located deep within an established residential area and the school would be a neighborhood school to which students could walk or bicycle on residential streets. It is 1500 feet north of Curren Elementary, which is becoming overcrowded. The property is long and narrow and would require a creative architectural design to ensure that the site would be secure and the playgrounds supervisable. Demolition of the former hospital and remediation of the asbestos and lead paint used in the building could be costly. The Department of Transportation has been asked to evaluate this site for air traffic safety.

The following section has been included in the event the Department of Transportation finds the site to be suitable in terms of air traffic safety.

Conditions:

Completion of requirements listed on form SFPD 4.01.

California Department of Transportation's favorable evaluation of this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Overline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSIT
#13

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 SCALE: 1" = 100'

DATE: 02 JAN
 SCALE: 1" = 1
 DRAWN
 SHEET



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

S i t e I n f o r m a t i o n	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Northeast Quadrant: Site 12</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Oxnard Boulevard at Robert Avenue</u>
S a f e t y	Master Plan Capacity <u>630</u> Site Size: Gross acres <u>11</u> Planned Joint Use: Land/Park <input type="checkbox"/> MTYRE _____ Net acres _____ Buildings <input type="checkbox"/> Grade level <u>K-6</u> CDE Recommended acres <u>9.90</u>
	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Railroad <input checked="" type="checkbox"/> Noise <input checked="" type="checkbox"/> Gas transmission lines <input checked="" type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
S e v e l o p m e n t	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>adj</u> Water <u>adj</u> Sewer <u>adj</u> Electricity <u>adj</u> Storm Drain _____ Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: <u>All major utilities exist on site.</u>
	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident.</u>
F i n a n c e	Are there existing structures on the site which need to be removed or demolished? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Comment: <u>Buildings of Ford and Nissan auto dealerships</u>
	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>No</u> Curb & gutter <u>Yes</u> Street paving <u>2</u> Street lighting _____ Fire Hydrant <u>1</u> Comment: _____
	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
R a n k i n g	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input checked="" type="checkbox"/> Comment: <u>The Ford property is thought to be available; the Nissan is unknown. Many have relocated to the Auto Mall.</u>
	Ranking: (1=high and 5 = low) Ranking of this Site <u>3</u> Number of sites evaluated <u>6</u> Relative ranking of this site <u>4</u>
	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site is beleaguered by environmental hazards, from busy Oxnard Boulevard to mainline railroad tracks, and Oxnard Airport. It is located near Curren Elementary, which is full.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

ents:

ary Site 12, at the intersection of Oxnard Boulevard (Highway 1) and Robert Avenue, is approvable provided all mental hazards are adequately addressed and successfully mitigated. There are, however, numerous environmental associated with this site.

is located on a busy, fast, noisy state highway. Union Pacific mainline railroad tracks run just east of Oxnard d. It is suspected that gas transmission lines are in the railroad track easement. The site is in the turning zone, of the inner turning zone, of Oxnard Airport. It is likely that the auto dealerships' properties contain toxic residues r operations. However, the site is well located to a current student housing need and in all ways other than safety : criteria for schoolsites. Effective mitigation of environmental hazards at this site is all-important to the viability ol in this location and approval by the Board of Education and the Department of Education.

ementary School is 1/3 mile from the site, but is presently full. It is understood that students would not come from nard Boulevard. A school here would be a neighborhood school. Entrance to the school may be best on Robert School buildings should be situated away from Oxnard Boulevard and sound attenuation would need to be an ral design element.

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n of requirements listed on form SFPD 4.01.

he attendance area for this school showing that no students will attend who live east of Oxnard Boulevard 1).

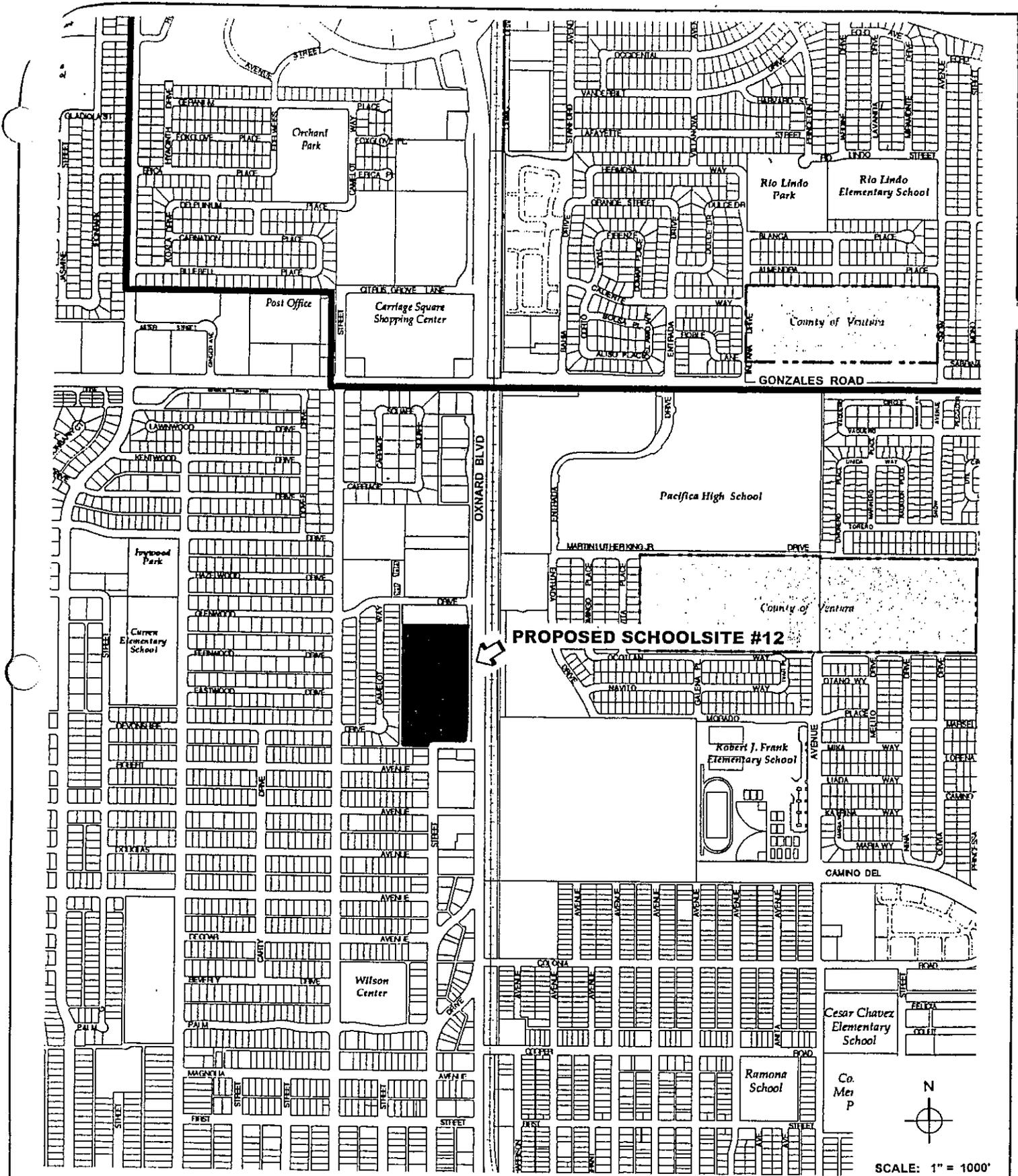
azard study is required to address the risks of proximity to Oxnard Boulevard.

ce of mainline railroad tracks within 1,500 feet of the site requires a railroad risk analysis pursuant to Title 5, 10 (d).

nia Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

ne environmental site assessment or the geological hazard report needs to include documentation of any gas n lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a n line risk analysis will be required.

assessments within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity eed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #12

DATE:
02 JAN 01

SCALE:
1" = 1000'

DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura
Site Identification: Northeast Quadrant: Site 11 SFP Application No.: 50/72538-00-
Location (cross streets): Oxnard Boulevard at Robert Avenue

Master Plan Capacity 630 Site Size: Gross acres 9 Planned Joint Use: Land/Park
MTYRE _____ Net acres _____ Buildings
Grade level K-6 CDE Recommended acres 9.90

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Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: See Comments and Conditions, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

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Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: All major utilities exist on site.

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Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: Buildings of Chevrolet auto dealership

Street improvements: (y = yes n = no p = proposed)
Sidewalk No Curb & gutter 1 Street paving 2 Street lighting _____ Fire Hydrant 1
Comment: _____

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Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

Is condemnation required? Yes No Unknown
Comment: The auto dealership is active, but may be a willing seller. Many dealerships have moved to the Auto Mall.

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Ranking: (1=high and 5 = low)
Ranking of this Site 3 Number of sites evaluated 6 Relative ranking of this site 5

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site is beleaguered by environmental hazards, from busy Oxnard Boulevard to mainline railroad tracks, and Oxnard Airport. It is located near Curren Elementary, which is full.

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 11, at the intersection of Oxnard Boulevard (Highway 1) and Glenwood Drive, is approvable provided all environmental hazards are adequately addressed and successfully mitigated. There are, however, numerous environmental hazards associated with this site.

This site is located on a busy, fast, noisy state highway. Union Pacific mainline railroad tracks run just east of Oxnard Boulevard. It is suspected that gas transmission lines are in the railroad track easement. The site is in the turning zone, though not the inner turning zone, of Oxnard Airport. It is likely that the auto dealership's property contains toxic residues from its operations. The site is well located, however, to a current student housing need and, in most ways other than safety, meets the criteria for schoolsites. Effective mitigation of environmental hazards at this site is all-important to the viability of a school in this location and approval by the Board of Education and the Department of Education.

Curren Elementary School is 1/3 mile from the site, but is presently full. It is understood that students would not come from east of Oxnard Boulevard. A school here would be a neighborhood school. A private school exists just west of the site. Entrance to the school is best on Glenwood Drive. The school buildings should be situated away from Oxnard Boulevard, and sound attenuation would need to be an architectural design element.

Conditions:

Completion of requirements listed on form SFPD 4.01.

A map of the attendance area for this school showing that no students will attend who live east of Oxnard Boulevard (Highway 1).

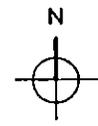
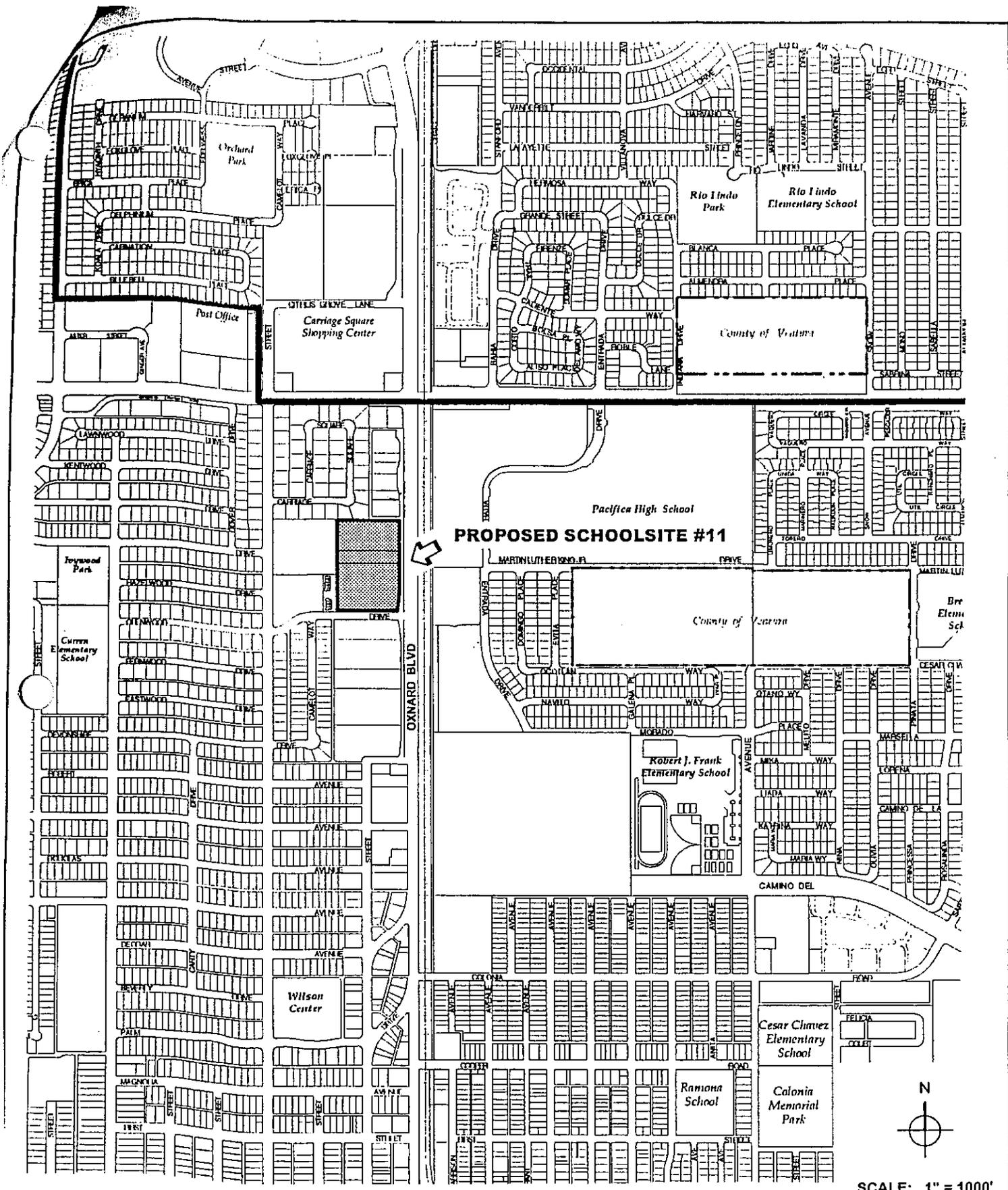
A traffic hazard study is required to address the risks of proximity to Oxnard Boulevard.

The existence of mainline railroad tracks within 1,500 feet of the site requires a railroad risk analysis pursuant to Title 5, Section 14010 (d).

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

PROJECT SITE PLAN
PROPOSED SCHOOLSITE #11

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura
Site Identification: Northeast Quadrant: Site 7 SFP Application No.: 50/72538-00-
Location (cross streets): Rose Avenue between Third Street and 5th Street

Master Plan Capacity 630 Site Size: Gross acres 13 Planned Joint Use: Land/Park
MTYRE _____ Net acres _____ Buildings
Grade level K-6 CDE Recommended acres 9.90

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Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: A vent pipe may indicate on-site pipelines. See Comments and Conditions, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

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Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: All major utilities are in Third Street.

Topography of site: Level Rolling Sloping Steep Other: _____

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Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
Drainage of the site could be problematic, but otherwise no special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: _____

Street improvements: (y = yes n = no p = proposed)
Sidewalk 2 Curb & gutter 2 Street paving 2 Street lighting 2 Fire Hydrant 0
Comment: All infrastructure is present and in operation.

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Funding: State Local Developer Other Estimated Land Value per acre _____
Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No
Is condemnation required? Yes No Unknown
Comment: The property is for sale.

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Ranking: (1=high and 5 = low)
Ranking of this Site 4 Number of sites evaluated 6 Relative ranking of this site 6

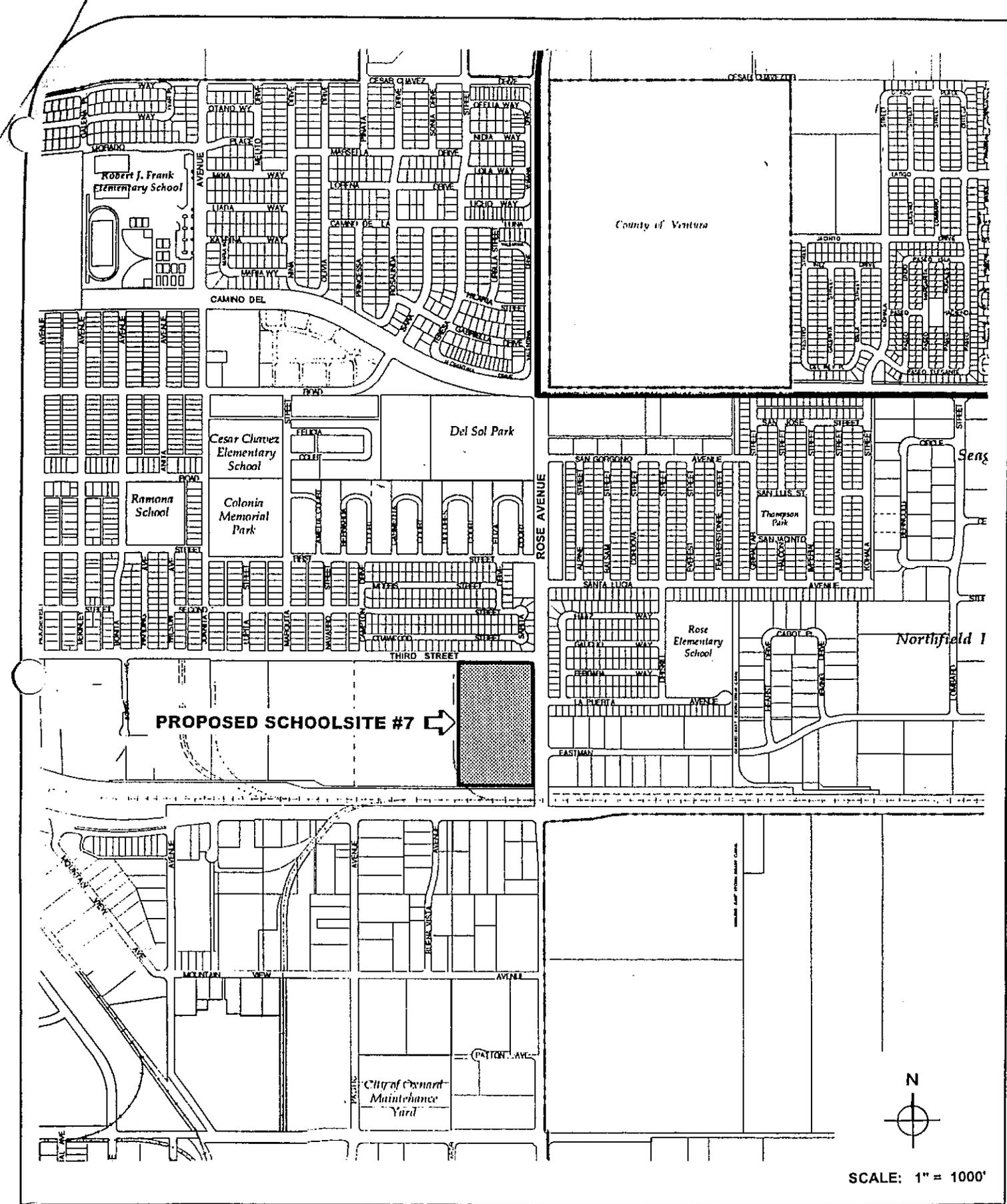
The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site has so many environmental hazards that it is unlikely to be made consistent with Title 5 requirements through mitigation measures or to receive approval. Three elementary schools exist within 1/2 mile of this site.

SITE DIAGRAM

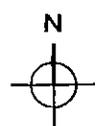
Please see map of schoolsite, attached.

Comments:

Elementary Site 7, in the northeast quadrant of the school district, is located in a heavily industrialized area of the city. It is on the periphery of a residential area north across Third Street. However, three elementary schools exist nearby to serve this neighborhood. Five sets of railroad tracks run along the southern boundary of the site, only one of which seems to be a spur. Switching yards are $\frac{1}{4}$ mile west. One or more high-pressure gas lines are buried in the railroad right-of-way according to markers near the tracks. A vent pipe on the site may indicate the presence of pipelines on the property. The intersection of 5th Street and Rose Avenue and the rail yards are very noisy. The land is in an area prone to flooding and has a high water table. Isolated by industry and by busy Rose Avenue, a school here would not really be a neighborhood school. Besides the size and availability of the site, the property has few of the desirable qualities needed to make a safe and educationally advantageous school. It is doubtful that all of the site's negative qualities can be sufficiently mitigated to make it consistent with Title 5 and to obtain approval. The Department of Education advises the School District against pursuing this site.



PROPOSED SCHOOLSITE #7 →



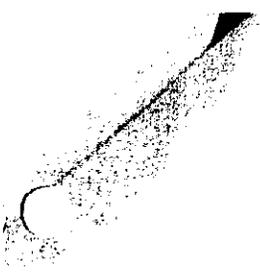
SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #7

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.



***SOUTHWEST
QUADRANT***

SFPD 4.0 School Site Field Reviews

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Several potential elementary school sites within the 130-acre area known as Mandalay Bay, located south of Wooley Road, east of the Edison Canal, west of Victoria Avenue, and north of Hemlock Street, are approvable provided all environmental hazards are adequately addressed and successfully mitigated. Sites bordering Victoria Avenue and Wooley Road should especially be avoided.

These sites exist within the local coastal plan, within two miles of Oxnard Airport, and within an area subject to flooding. Victoria Avenue, on the east, is a fast, busy, noisy, arterial road. Wooley Road, on the north, contains high-voltage powerlines. A Southern California Edison substation is located on the northwest corner of the Victoria Avenue and Hemlock Street intersection. And an open and unfenced canal system exists in this developing residential area. Nevertheless, the 130-acre area is in an advantageous location for a new, neighborhood elementary school to serve the students living south of Wooley Road and west of Victoria Avenue, and with proper mitigation of environmental dangers, will make a safe and educationally advantageous school.

Concurrence in the site selection from the City of Oxnard, the local administering agency of the Coastal Act, is very desirable and should be sought early in the site selection process. An analysis of the flood plain and attendant design and transportation issues should be performed early in the School District's investigation of the site. Risks associated with open canals in this area of the city need to be carefully considered and addressed. It is thought that Wooley Road and Victoria Avenue will mark the northern and eastern boundaries of the attendance area for this school. The majority of students, it is anticipated, will walk or bicycle to school.

This is a cultivated agricultural site, on which residual pesticides are likely to exist. A Preliminary Environmental Assessment, conducted under the auspices of the Department of Toxic Substances Control, is virtually a certainty for any land long cultivated.

Conditions:

Completion of requirements listed on form SFPD 4.01.

If students are to cross Victoria Avenue or Wooley Road, a traffic hazard study and a safe routes to school plan will be required.

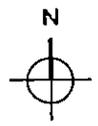
The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements, including power substations, within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.

PROPOSED SCHOOLSITE #4

CHANNEL ISLAND SUBSTATION



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #4

DATE:
02 JAN 01
SCALE:
1" = 1000'
DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura
Site Identification: Southwest Quadrant: Site 18 SFP Application No.: 50/72538-00-
Location (cross streets): Hemlock Street between Victoria Avenue and Fisher Drive

Master Plan Capacity 630 Site Size: Gross acres 10 Planned Joint Use: Land/Park
MTYRE _____ Net acres 9.6 Buildings
Grade level K-6 CDE Recommended acres 9.90

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: See Comments and Conditions, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: _____

Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: A commercial shopping center, a gas station, and six 4-plex residences

Street improvements: (y = yes n = no p = proposed)
Sidewalk Y Curb & gutter Y Street paving 3 Street lighting Y Fire Hydrant _____
Comment: All major infrastructure is present and operating.

Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

Is condemnation required? Yes No Unknown
Comment: Households in 24 residences and several commercial businesses would also need to be relocated.

Ranking: (1=high and 5 = low)
Ranking of this Site 4 Number of sites evaluated 2 Relative ranking of this site 2

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site is located on the wrong side of Victoria Avenue and, after probable condemnation and certain relocation of residences and businesses, would be very expensive. The site is approvable for a new elementary, though badly located.

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 18, in the southwest quadrant of the school district, located on Hemlock Street between Victoria Avenue and Fisher Drive, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

This site is located on the east side of Victoria Avenue, and as such is substantially inferior to a comparable site west of Victoria to serve the student population west of Victoria Avenue and south of Wooley Road. The majority of students would have to cross Victoria Avenue. McAuliffe Elementary is 4/10 mile by street route from this site.

This site is within two miles of Oxnard Airport and adjacent to Victoria Avenue on the west, a fast, busy, noisy, arterial road. A Southern California Edison substation is located on the northwest corner of the Victoria Avenue and Hemlock Street intersection. This may be an indication of high-voltage powerlines in Victoria or Hemlock. A Chevron gas station and a dry cleaning establishment operate on the property, which may foretell time consuming and costly environmental cleanup. The site is within an area subject to flooding, and an analysis of the flood plain and attendant design and transportation issues should be performed early in the School District's investigation of the site. *Eminent domain* court proceedings and relocation of residents and businesses can be arduous and costly.

Conditions:

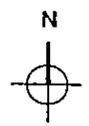
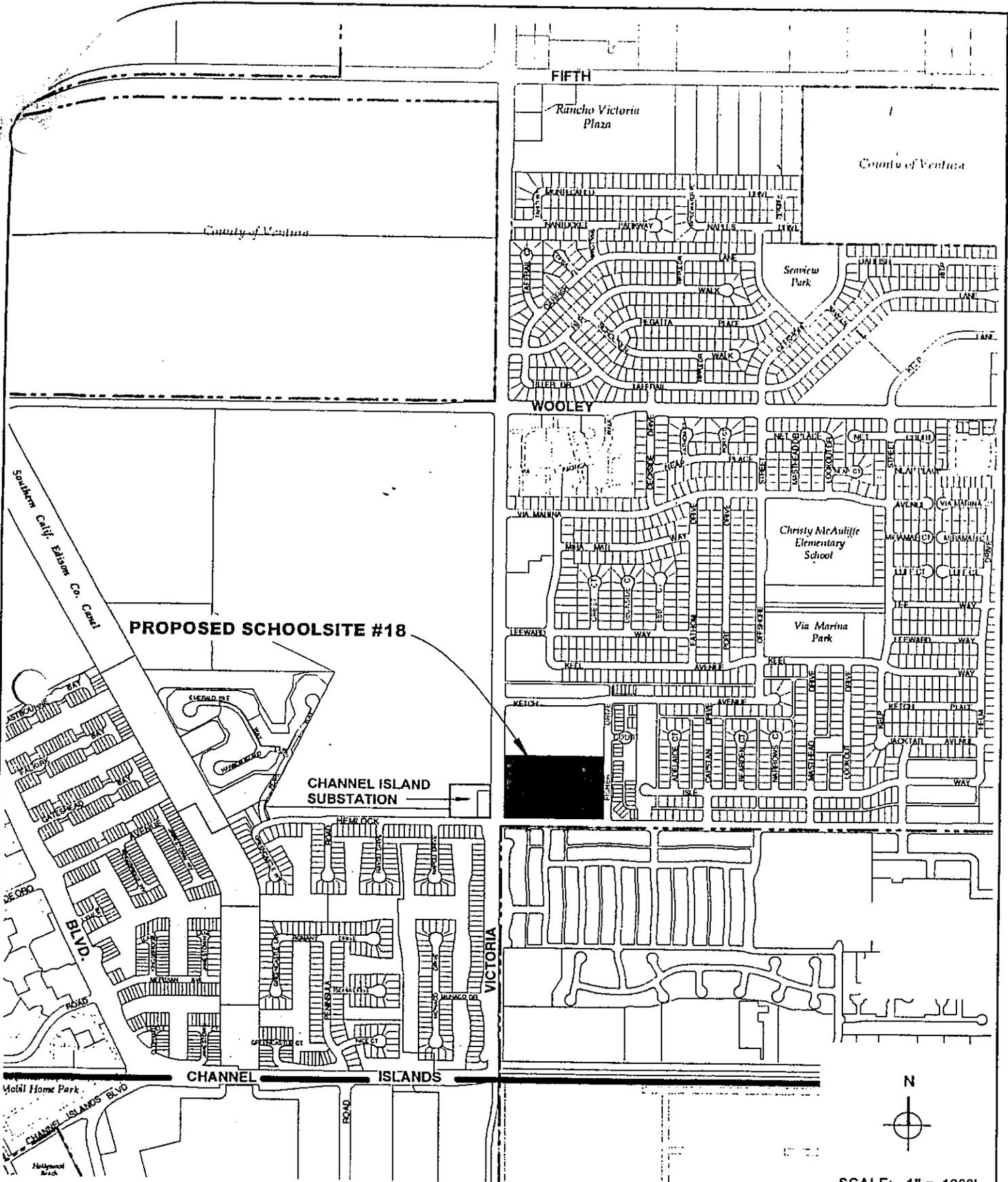
Completion of requirements listed on form SFPD 4.01.

A traffic hazard study and a safe routes to school plan will be required.

The California Department of Transportation must evaluate this site's safety relative to Oxnard Airport.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements, including power substations, within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #18

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

NORTHWEST QUADRANT

SFPD 4.0 School Site Field Reviews



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 9/13/00

Site Information	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Northwest Quadrant: Site 3</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Gonzalez Road, immediately south of Oxnard High School, and 500 feet east of Patterson Road</u>
Master Plan Capacity	Master Plan Capacity <u>630</u> Site Size: Gross acres <u>27</u> Planned Joint Use: Land/Park <input checked="" type="checkbox"/>
	MTYRE _____ Net acres <u>9.9</u> Buildings <input checked="" type="checkbox"/>
	Grade level <u>K-6</u> CDE Recommended acres <u>9.90</u>
Safety	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Noise <input type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Site Utilities	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>1800 ft</u> Water <u>1800 ft</u> Sewer <u>1200 ft</u> Electricity <u>1800 ft</u> Storm Drain _____
	Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: _____
Development	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident. The building pads will need to be raised from the flood plain.</u>
Funding	Are there existing structures on the site which need to be removed or demolished? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comment: _____
	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>No</u> Curb & gutter <u>No</u> Street paving <u>No</u> Street lighting <u>No</u> Fire Hydrant <u>No</u> Comment: <u>The site is presently landlocked. A road from Patterson Road or Doris Avenue would need to be constructed.</u>
Finance	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Ranking	Is condemnation required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Comment: <u>The site is owned either by the Oxnard High District or the State of California.</u>
	Ranking: (1=high and 5 = low) Ranking of this Site <u>2</u> Number of sites evaluated <u>3</u> Relative ranking of this site <u>1</u>
g	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.
	<input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site has excellent potential for a new elementary school. The opportunity may exist to create an "educational park" with adjacent Oxnard High School and a new intermediate school.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 3, on 27 acres immediately south of and adjacent to Oxnard High School on Gonzalez Road, east of the intersection with Patterson Road, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

The site, though existing within two miles of Oxnard Airport, in an area subject to flooding, and presently surrounded on three sides by agriculture, is nevertheless in a good location for a new school or complex of schools. Acreage is sufficient to construct both a new middle school and a new elementary school on this property.

The Aeronautics Program of the California Department of Transportation has found this site to be acceptably safe from an air traffic safety perspective. An analysis of the flood plain and attendant design and transportation issues should be performed early in the School District's investigation of the site. The safe transport of students to and from school needs to be carefully considered as students are likely to need to cross busy, arterial roads. This is a cultivated agricultural site, on which residual pesticides are likely to exist. To the extent that the surrounding land continues in agricultural production, pesticide drift could be an issue, even though those applying pesticides are obligated to control their travel. A Preliminary Environmental Assessment, conducted under the auspices of the Department of Toxic Substances Control, is virtually a certainty for any land long cultivated. The District will want to take into consideration the likelihood and timing of residential construction east of Victoria Avenue, both in terms of environmental concerns and in terms of large off-site and utility extension costs.

Conditions:

Completion of requirements listed on form SFPD 4.01.

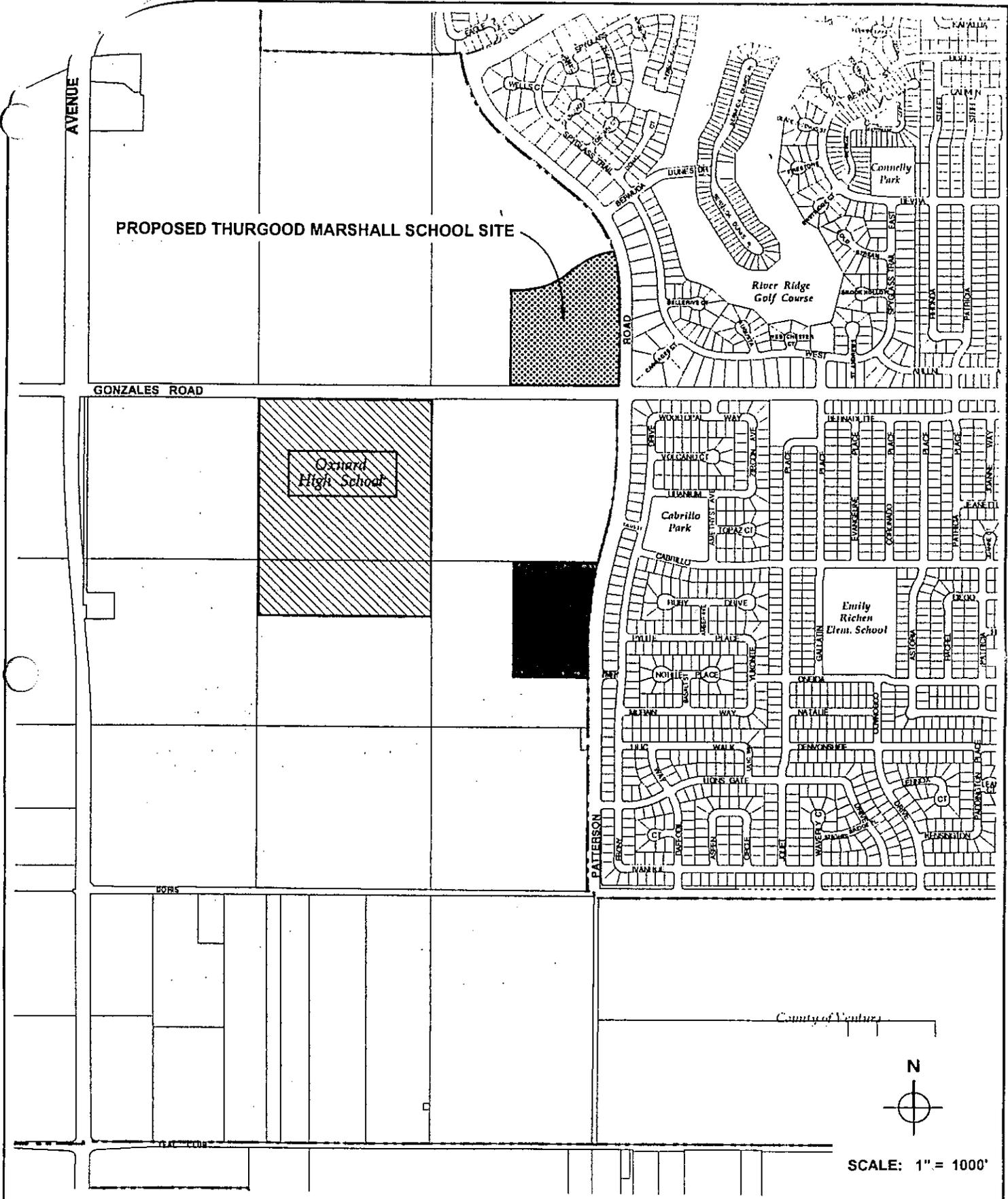
A traffic hazard study and a safe routes to school plan will be required. It is thought that seventy to eighty percent of the student population that would initially attend this school would need to be bused.

If Nebula Street is extended west across Patterson Road to provide access to homes and this schoolsite, a mitigation plan for hazards associated with the drainage canal running along the probable street extension will be a requirement of site approval.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.

A high-pressure water line exists along the eastern perimeter of the property. The potential safety and property hazards of having this line in this location needs to be assessed by competent personnel and any required mitigations need to be incorporated into the plans.



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED MARSHALL SCHOOL SITE

DATE:
 02 JAN 01

SCALE:
 1" = 1000'

DRAWING No.

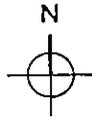
PROPOSED THURGOOD MARSHALL SCHOOL SITE

Oxnard High School

PROPOSED SCHOOLSITE #28



County of Ventura



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #28

DATE:
02 JAN 01
SCALE:
1" = 1000'
DRAWING No.



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 9/13/00

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District: Oxnard Elementary County: Ventura

Site Identification: Northwest Quadrant: Site 2 SFP Application No.: 50/72538-00-

Location (cross streets): Vineyard Avenue and Ventura Road

Master Plan Capacity 630 Site Size: Gross acres 19 Planned Joint Use: Land/Park

MTYRE _____ Net acres 9.9 Buildings

Grade level K-6 CDE Recommended acres 9.90

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise

Gas transmission lines Electric transmission lines Other

Comment: Former city dump and Santa Clara River are nearby. See Comments and Conditions, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)

Gas adj Water adj Sewer adj Electricity adj Storm Drain _____

Special needs: Well Septic Other: _____

Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:

No special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No

Comment: _____

Street improvements: (y = yes n = no p = proposed)

Sidewalk _____ Curb & gutter _____ Street paving 2 Street lighting _____ Fire Hydrant _____

Comment: _____

Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

Is condemnation required? Yes No Unknown

Comment: _____

Ranking: (1=high and 5 = low)

Ranking of this Site 4 Number of sites evaluated 3 Relative ranking of this site 3

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**

The CDE recommends that the district no longer pursue acquiring this site.

Comment: This site is located at the junction of two major arterial roads and near a toxic former city dumpsite. It is at the northern extremity of the school district and would naturally serve the same student population as Marshall Elementary.

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Elementary Site 2, on 19 acres at the northwest corner of Ventura Road and Vineyard Avenue, and bounded on the northwest by a former city dump, is an aesthetically attractive yet poorly located site for a new elementary school. It is approvable only if no better alternatives exist and provided all environmental hazards can be adequately addressed and successfully mitigated.

This site is located, however, at the northern extremity of the school district at the intersection of two busy, four-lane divided, arterial roadways. Sierra Linda School is located nearby and serves students living east of Ventura Road and North of Gonzalez Road. The soon-to-be-constructed Marshall School will serve students living west of Ventura Road and North of Gonzalez Road. The acreage is sufficient on which to construct an intermediate school, though it would still be inconveniently located relative to roadways, the landfill, and the school district. A Preliminary Endangerment Assessment, conducted under the auspices of the Department of Toxic Substances Control, is a virtual certainty. The site is within two air miles of Oxnard Airport and will require a favorable evaluation from the Department of Transportation.

Conditions:

Completion of requirements listed on form SFPD 4.01.

A traffic hazard study and a safe routes to school plan will be required.

An analysis of the Santa Clara River and its potential to inundate the site will be necessary.

The Department of Transportation, Aeronautics Program, must evaluate this site for air traffic safety.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.

City of Ventura

Buena Ventura Golf Course

RIVER

PROPOSED SCHOOLSITE #2

River Ridge Golf Course

101

Southbank Park

Sierra Linda Park

Sierra Linda Elem. School

Connelly Park

River Ridge Golf Course

VINEYARD



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #2

DATE:
 23 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

***MIDDLE
SCHOOL
SITES***

SFPD 4.0 School Site Field Reviews



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 9/13/00

S i t e I n f o r m a t i o n	District: <u>Oxnard Elementary</u> County: <u>Ventura</u>
	Site Identification: <u>Site 3</u> SFP Application No.: <u>50/72538-00-</u>
	Location (cross streets): <u>Gonzalez Road, immediately south of Oxnard High School, and 500 feet east of Patterson Road</u>
M a s t e r P l a n C a p a c i t y	Master Plan Capacity <u>950</u> Site Size: Gross acres <u>27</u> Planned Joint Use: Land/Park <input type="checkbox"/>
	MTYRE <u>No</u> Net acres <u>15</u> Buildings <input type="checkbox"/>
	Grade level <u>7-8</u> CDE Recommended acres <u>15.00</u>
S a f e t y	Potential Hazards: Seismic <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Toxic <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Noise <input type="checkbox"/> Gas transmission lines <input type="checkbox"/> Electric transmission lines <input type="checkbox"/> Other <input type="checkbox"/> Comment: <u>See Comments and Conditions, page two.</u>
	Within two miles of airport runway? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Within two miles of heliport? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
U t i l i t i e s	Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent) Gas <u>1800 ft</u> Water <u>1800 ft</u> Sewer <u>1200 ft</u> Electricity <u>1800 ft</u> Storm Drain _____
	Special needs: Well <input type="checkbox"/> Septic <input type="checkbox"/> Other: _____
T o p o g r a p h y	Topography of site: Level <input checked="" type="checkbox"/> Rolling <input type="checkbox"/> Sloping <input type="checkbox"/> Steep <input type="checkbox"/> Other: _____
	Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks: <u>No special site preparation problems are evident. The building pads will need to be raised from the flood plain.</u>
D e v e l o p m e n t	Are there existing structures on the site which need to be removed or demolished? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Comment: _____
	Street improvements: (y = yes n = no p = proposed) Sidewalk <u>No</u> Curb & gutter <u>No</u> Street paving <u>No</u> Street lighting <u>No</u> Fire Hydrant <u>No</u> Comment: <u>The site is presently landlocked. A road from Patterson Road or Doris Avenue would need to be constructed.</u>
F i n a n c e	Funding: State <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Developer <input type="checkbox"/> Other <input type="checkbox"/> Estimated Land Value per acre _____
	Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Is condemnation required? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Comment: <u>The site is owned either by the Oxnard High District or the State of California.</u>
R a n k i n g	Ranking: (1=high and 5 = low) Ranking of this Site <u>2</u> Number of sites evaluated <u>1</u> Relative ranking of this site _____
	<input checked="" type="checkbox"/> The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL. <input type="checkbox"/> The CDE recommends that the district no longer pursue acquiring this site. Comment: <u>This site has excellent potential for a new middle school. The opportunity may exist to create an "educational park" with adjacent Oxnard High School and a new elementary school.</u>

SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Intermediate Site 3, immediately south of and adjacent to Oxnard High School on Gonzalez Road, and east of the intersection with Patterson Road, is approvable provided all environmental hazards are adequately addressed and successfully mitigated.

The site, though existing within two miles of Oxnard Airport, in an area subject to flooding, and presently surrounded on three sides by agriculture, is nevertheless in a good location for a new school or complex of schools. Acreage is sufficient to construct both a new middle school and a new elementary school on this property.

The Aeronautics Program of the California Department of Transportation has found this site to be acceptably safe from an air traffic safety perspective. An analysis of the flood plain and attendant design and transportation issues should be performed early in the School District's investigation of the site. The safe transport of students to and from school needs to be carefully considered as students are likely to need to cross busy, arterial roads. This is a cultivated agricultural site, on which residual pesticides are likely to exist. To the extent that the surrounding land continues in agricultural production, pesticide drift could be an issue, even though those applying pesticides are obligated to control their travel. A Preliminary Environmental Assessment, conducted under the auspices of the Department of Toxic Substances Control, is virtually a certainty for any land long cultivated. The District will want to take into consideration the likelihood and timing of residential construction east of Victoria Avenue, both in terms of environmental concerns and in terms of large off-site and utility extension costs.

Conditions:

Completion of requirements listed on form SFPD 4.01.

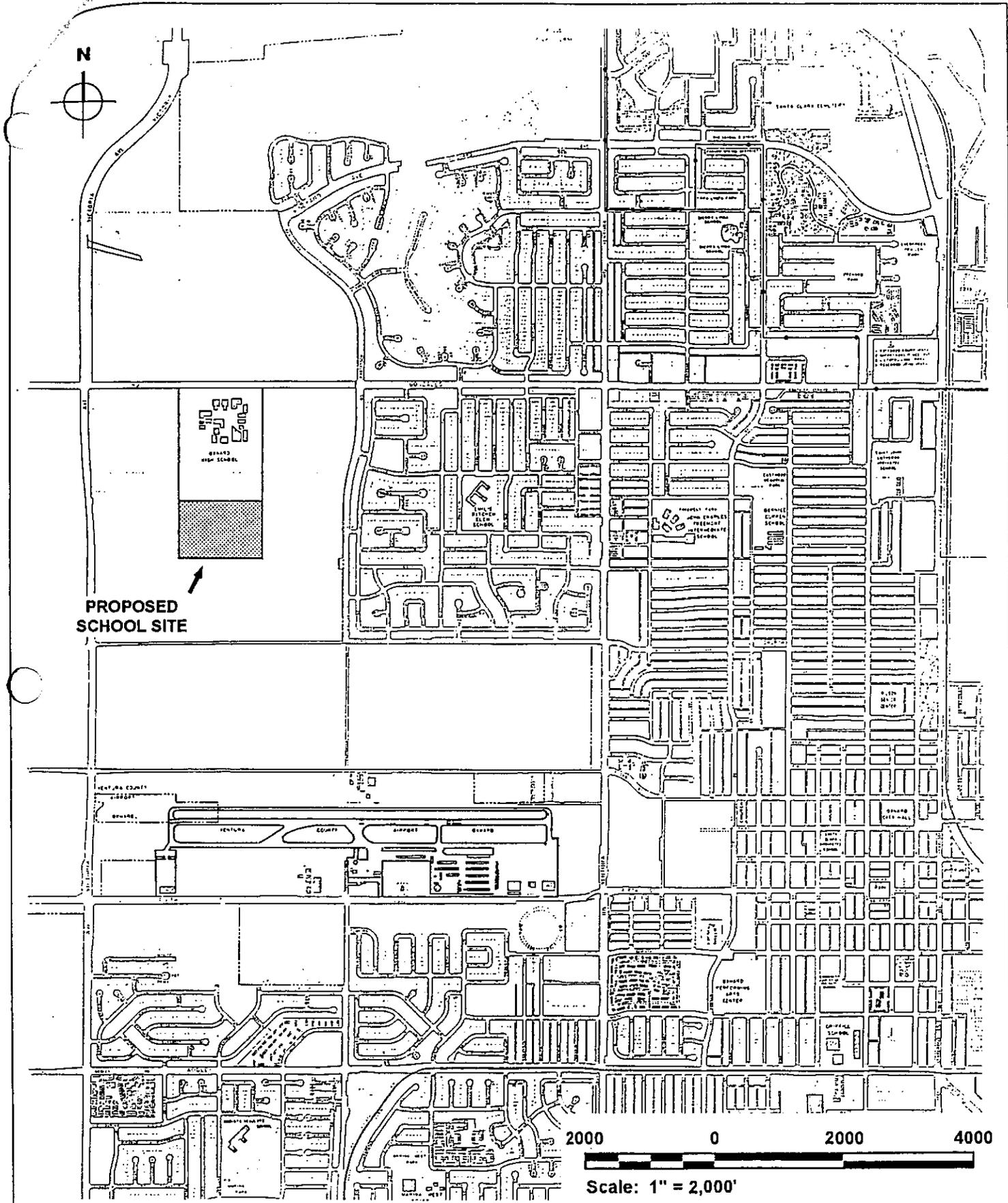
A traffic hazard study and a safe routes to school plan will be required. It is thought that seventy to eighty percent of the student population that would initially attend this school would need to be bused.

If Nebula Street is extended west across Patterson Road to provide access to homes and this schoolsite, a mitigation plan for hazards associated with the drainage canal running along the probable street extension will be a requirement of site approval.

The phase one environmental site assessment or the geological hazard report needs to include documentation of any gas transmission lines or easements within 1,500 feet. In the event such gas or gasoline transmission lines or easements exist, a transmission line risk analysis will be required.

Powerline easements within 500 feet radius of the schoolsite need to be checked to ensure their *potential* carrying capacity does not exceed 50 kilovolts. In the event such easements do exist, the setbacks found in Title 5, Section 14010 (c), must be observed.

A high-pressure water line exists along the eastern perimeter of the property. The potential safety and property hazards of moving this line in this location needs to be assessed by competent personnel and any required mitigations need to be incorporated into the plans.



DATE: 16 OCT 00
 SCALE: 1" = 2,000'
 DRAWN: JA

OXNARD SCHOOL DISTRICT
 1051 SOUTH A STREET
 OXNARD, CALIFORNIA

VICINITY MAP
 PROPOSED NORTHWEST SCHOOL

DRAWING No.
 SHEET 1 of 2



SFPD 4.0 School Site Field Review

California Department of Education
School Facilities Planning Division

Consultant: George Shaw

Date of Review: 12/15/00

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District: Oxnard Elementary County: Ventura

Site Identification: Southeast Quadrant: Site 8 SFP Application No.: 50/72538-00-

Location (cross streets): Wooley Road between Pacific Avenue and Mercantile Street, north of Voyager Place

Master Plan Capacity 950 Site Size: Gross acres 25 Planned Joint Use: Land/Park
MTYRE Net acres 15.0 Buildings
Grade level 7-8 CDE Recommended acres 15.00

Potential Hazards: Seismic Traffic Toxic Flood Railroad Noise
Gas transmission lines Electric transmission lines Other
Comment: Industrial area. See Comments and Conditions, page two.

Within two miles of airport runway? Yes No Within two miles of heliport? Yes No

Utilities: (distance to nearest line of suitable capacity in ft = feet, yds = yards, or mi = miles, adj = adjacent)
Gas adj Water adj Sewer adj Electricity adj Storm Drain _____
Special needs: Well Septic Other: _____

Topography of site: Level Rolling Sloping Steep Other: _____

Site Development: Comment on any of the following which may present a cause for concern: erosion control, drainage problems, special soil conditions, extensive grading, extensive work required for streets and sidewalks:
No special site preparation problems are evident.

Are there existing structures on the site which need to be removed or demolished? Yes No
Comment: _____

Street improvements: (y = yes n = no p = proposed)
Sidewalk No Curb & gutter 1 Street paving 2.5 Street lighting _____ Fire Hydrant _____
Comment: _____

Funding: State Local Developer Other Estimated Land Value per acre _____

Does the district plan to file a Financial Hardship Application for this project (per SB 50 Reg. 1859.81)? Yes No

Is condemnation required? Yes No Unknown
Comment: _____

Ranking: (1=high and 5 = low)
Ranking of this Site 5 Number of sites evaluated 1 Relative ranking of this site _____

The CDE's preliminary review of this site indicates that the district may proceed with further evaluation of the site including the completion of the SFPD 4.01, 4.02 and 4.03. **THIS REVIEW DOES NOT CONSTITUTE A FINAL SITE APPROVAL.**
 The CDE recommends that the district no longer pursue acquiring this site.
Comment: This site is in the center of industrial Oxnard, surrounded by all environmental hazards schools should avoid.

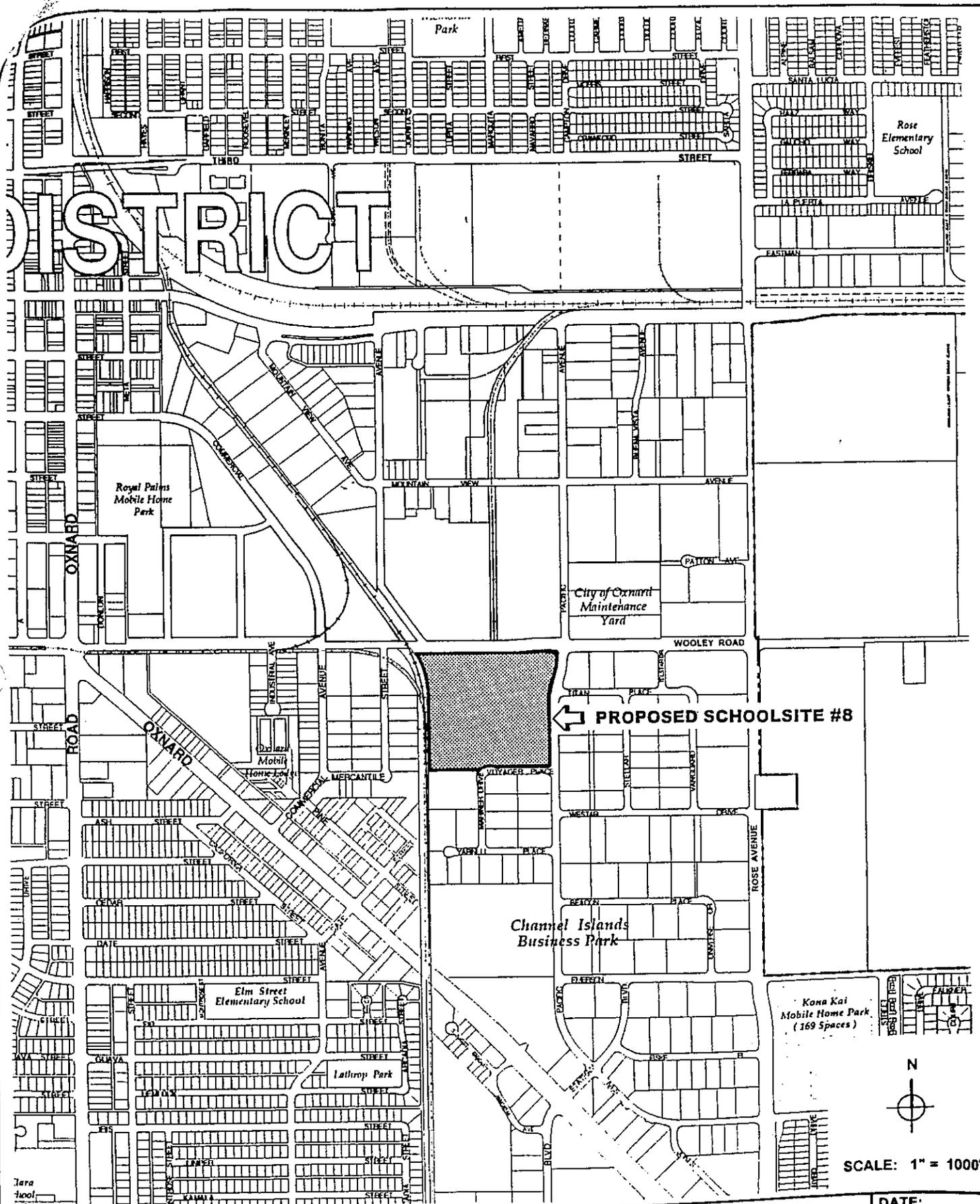
SITE DIAGRAM

Please see map of schoolsite, attached.

Comments:

Intermediate Site 8, in the southeast quadrant of the school district, is located in an old industrial zone. A pesticide mixing facility is directly north of the site. An old sugarbeet factory at which lead was used in processing is to the northwest. A chrome plating facility and a show girls bar are among the businesses located west of the site, on the other side of railroad tracks and high-voltage powerlines. The activities and events likely to occur around the schoolsite over time could well be inconsistent with the goals of the School District to keep its students and teachers safe from environmental hazards. Few homes exist in the vicinity of the site. A busing program would be an inevitable and permanent reality for the school. A school here would never be a neighborhood school. Apart from the size and availability of the site, it is difficult to find any positive qualities in this property that make it suitable for a school of any kind. The site's negative qualities cannot in all likelihood be mitigated sufficiently to make it consistent with Title 5 and to obtain approval. Although it recognizes that intermediate school sites are difficult to identify in the city, the Department of Education advises the School District against proceeding with this site. If an intermediate school site is required in this section of the school district, Site 19 and the area around it might be considered.

DISTRICT



SCALE: 1" = 1000'



OXNARD SCHOOL DISTRICT
1051 SOUTH "A" STREET
OXNARD, CALIFORNIA 93030

VICINITY MAP
PROPOSED SCHOOLSITE #8

DATE:
 02 JAN 01
 SCALE:
 1" = 1000'
 DRAWING No.

Doris-Patterson
Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	700.00	Student	1.34	58,522.36	0
Junior High School	1,200.00	Student	23.09	141,074.02	0
General Office Building	24.84	1000sqft	0.57	24,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total site size 25 acres

Construction Phase - Construction expected to conclude prior to opening in 2020-2021 school year

Architectural Coating - Low VOC paint at 100 g/L

Vehicle Trips - 1.29 to 1.50, 11.01 to 22.62, 1.62 to 1.61 as calculated from traffic study

Area Coating - Low VOC at 100 g/L

Construction Off-road Equipment Mitigation - Tier 2 engines

Mobile Land Use Mitigation -

Area Mitigation - Mitigation as recorded

Water Mitigation -

Waste Mitigation - 48% reduction in CA

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	370.00	270.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	PhaseEndDate	5/4/2020	6/3/2020
tblConstructionPhase	PhaseStartDate	4/7/2020	5/7/2020
tblLandUse	LotAcreage	3.24	23.09
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Energy	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
Mobile	8.4757	17.0495	77.1898	0.1995	14.8060	0.2290	15.0350	3.9471	0.2113	4.1584		15,341.3788	15,341.3788	0.5714		15,353.3792
Total	14.5887	17.7806	78.0002	0.2039	14.8060	0.2852	15.0912	3.9471	0.2675	4.2145		16,216.9674	16,216.9674	0.5893	0.0160	16,234.3176

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Energy	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
Mobile	8.3837	16.3698	74.8443	0.1899	14.0678	0.2189	14.2867	3.7503	0.2020	3.9523		14,604.2994	14,604.2994	0.5466		14,615.7780
Total	13.4964	17.1010	75.6547	0.1943	14.0678	0.2751	14.3428	3.7503	0.2582	4.0084		15,479.8880	15,479.8880	0.5645	0.0160	15,496.7164

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.49	3.82	3.01	4.69	4.99	3.55	4.96	4.99	3.49	4.89	0.00	4.55	4.55	4.21	0.00	4.54

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2019	2/4/2019	5	25	
2	Grading	Grading	2/5/2019	3/25/2019	5	35	
3	Building Construction	Building Construction	3/26/2019	4/6/2020	5	270	
4	Paving	Paving	5/7/2020	6/3/2020	5	20	
5	Architectural Coating	Architectural Coating	6/4/2020	7/1/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 336,655; Non-Residential Outdoor: 112,218 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	92.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784		3,876.723 3	3,876.723 3	1.2266		3,902.481 0
Total	4.0188	42.5046	34.8088	0.0391	18.0663	2.1505	20.2167	9.9307	1.9784	11.9091		3,876.723 3	3,876.723 3	1.2266		3,902.481 0

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0525	0.0591	0.5813	1.6800e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		125.4342	125.4342	5.8300e-003			125.5566
Total	0.0525	0.0591	0.5813	1.6800e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		125.4342	125.4342	5.8300e-003			125.5566

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000	
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	3,876.7233	3,876.7233	1.2266			3,902.4810
Total	1.2300	34.4240	23.4003	0.0391	8.1298	0.9611	9.0909	4.4688	0.9611	5.4299	0.0000	3,876.7233	3,876.7233	1.2266			3,902.4810

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0525	0.0591	0.5813	1.6800e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		125.4342	125.4342	5.8300e-003			125.5566
Total	0.0525	0.0591	0.5813	1.6800e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		125.4342	125.4342	5.8300e-003			125.5566

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336			6,151.9167
Total	4.8912	54.1978	40.2888	0.0617	8.6733	2.5049	11.1783	3.5965	2.3045	5.9010		6,111.3121	6,111.3121	1.9336			6,151.9167

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0584	0.0657	0.6459	1.8700e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		139.3713	139.3713	6.4700e-003			139.5073
Total	0.0584	0.0657	0.6459	1.8700e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		139.3713	139.3713	6.4700e-003			139.5073

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000				0.0000
Off-Road	1.8922	50.9465	37.9432	0.0617		1.3783	1.3783		1.3783	1.3783	0.0000	6,111.3121	6,111.3121	1.9336			6,151.9167
Total	1.8922	50.9465	37.9432	0.0617	3.9030	1.3783	5.2813	1.6184	1.3783	2.9967	0.0000	6,111.3121	6,111.3121	1.9336			6,151.9167

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0584	0.0657	0.6459	1.8700e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		139.3713	139.3713	6.4700e-003			139.5073
Total	0.0584	0.0657	0.6459	1.8700e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		139.3713	139.3713	6.4700e-003			139.5073

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279			2,593.9479
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279			2,593.9479

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2875	2.7389	4.5524	8.2000e-003	0.2436	0.0448	0.2883	0.0693	0.0412	0.1104		782.3751	782.3751	5.1300e-003			782.4829
Worker	0.2685	0.3022	2.9709	8.5900e-003	0.7558	5.5000e-003	0.7613	0.2005	5.1000e-003	0.2056		641.1080	641.1080	0.0298			641.7335
Total	0.5560	3.0410	7.5233	0.0168	0.9994	0.0503	1.0496	0.2697	0.0463	0.3160		1,423.4831	1,423.4831	0.0349			1,424.2163

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2875	2.7389	4.5524	8.2000e-003	0.2436	0.0448	0.2883	0.0693	0.0412	0.1104		782.3751	782.3751	5.1300e-003			782.4829
Worker	0.2685	0.3022	2.9709	8.5900e-003	0.7558	5.5000e-003	0.7613	0.2005	5.1000e-003	0.2056		641.1080	641.1080	0.0298			641.7335
Total	0.5560	3.0410	7.5233	0.0168	0.9994	0.0503	1.0496	0.2697	0.0463	0.3160		1,423.4831	1,423.4831	0.0349			1,424.2163

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194			2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194			2,555.4880

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2702	2.2890	4.4309	8.1900e-003	0.2437	0.0403	0.2840	0.0693	0.0371	0.1064		764.9558	764.9558	4.9900e-003			765.0606
Worker	0.2525	0.2801	2.7615	8.5900e-003	0.7558	5.4900e-003	0.7613	0.2005	5.0900e-003	0.2056		615.3738	615.3738	0.0282			615.9656
Total	0.5228	2.5690	7.1924	0.0168	0.9994	0.0458	1.0453	0.2698	0.0422	0.3119		1,380.3296	1,380.3296	0.0332			1,381.0262

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,542.4799	2,542.4799	0.6194			2,555.4880
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,542.4799	2,542.4799	0.6194			2,555.4880

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2702	2.2890	4.4309	8.1900e-003	0.2437	0.0403	0.2840	0.0693	0.0371	0.1064		764.9558	764.9558	4.9900e-003			765.0606
Worker	0.2525	0.2801	2.7615	8.5900e-003	0.7558	5.4900e-003	0.7613	0.2005	5.0900e-003	0.2056		615.3738	615.3738	0.0282			615.9656
Total	0.5228	2.5690	7.1924	0.0168	0.9994	0.0458	1.0453	0.2698	0.0422	0.3119		1,380.3296	1,380.3296	0.0332			1,381.0262

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0412	0.0457	0.4503	1.4000e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		100.3327	100.3327	4.5900e-003		100.4292
Total	0.0412	0.0457	0.4503	1.4000e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		100.3327	100.3327	4.5900e-003		100.4292

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,160.7571	2,160.7571	0.6988		2,175.4326

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0412	0.0457	0.4503	1.4000e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		100.3327	100.3327	4.5900e-003		100.4292
Total	0.0412	0.0457	0.4503	1.4000e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		100.3327	100.3327	4.5900e-003		100.4292

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	104.0263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057
Total	104.2685	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9057

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0494	0.0548	0.5403	1.6800e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		120.3992	120.3992	5.5100e-003			120.5150
Total	0.0494	0.0548	0.5403	1.6800e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		120.3992	120.3992	5.5100e-003			120.5150

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	104.0263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218			281.9057
Total	104.1402	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218			281.9057

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0494	0.0548	0.5403	1.6800e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		120.3992	120.3992	5.5100e-003			120.5150
Total	0.0494	0.0548	0.5403	1.6800e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		120.3992	120.3992	5.5100e-003			120.5150

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.3837	16.3698	74.8443	0.1899	14.0678	0.2189	14.2867	3.7503	0.2020	3.9523		14,604.29 94	14,604.29 94	0.5466		14,615.77 80
Unmitigated	8.4757	17.0495	77.1898	0.1995	14.8060	0.2290	15.0350	3.9471	0.2113	4.1584		15,341.37 88	15,341.37 88	0.5714		15,353.37 92

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	903.00	0.00	0.00	1,422,186	1,351,276
General Office Building	273.49	58.87	24.34	495,244	470,551
Junior High School	1,944.00	0.00	0.00	3,121,778	2,966,127
Total	3,120.49	58.87	24.34	5,039,208	4,787,953

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475060	0.062670	0.180903	0.157882	0.069305	0.010127	0.013604	0.017861	0.000759	0.000687	0.005630	0.000316	0.005195

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
NaturalGas Unmitigated	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior High School	4796.52	0.0517	0.4703	0.3950	2.8200e-003		0.0357	0.0357		0.0357	0.0357		564.2961	564.2961	0.0108	0.0104	567.7303
Elementary School	1989.76	0.0215	0.1951	0.1639	1.1700e-003		0.0148	0.0148		0.0148	0.0148		234.0894	234.0894	4.4900e-003	4.2900e-003	235.5141
General Office Building	652.645	7.0400e-003	0.0640	0.0538	3.8000e-004		4.8600e-003	4.8600e-003		4.8600e-003	4.8600e-003		76.7818	76.7818	1.4700e-003	1.4100e-003	77.2491
Total		0.0802	0.7293	0.6126	4.3700e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0161	880.4935

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior High School	4.79652	0.0517	0.4703	0.3950	2.8200e-003		0.0357	0.0357		0.0357	0.0357		564.2961	564.2961	0.0108	0.0104	567.7303
Elementary School	1.98976	0.0215	0.1951	0.1639	1.1700e-003		0.0148	0.0148		0.0148	0.0148		234.0894	234.0894	4.4900e-003	4.2900e-003	235.5141
General Office Building	0.652645	7.0400e-003	0.0640	0.0538	3.8000e-004		4.8600e-003	4.8600e-003		4.8600e-003	4.8600e-003		76.7818	76.7818	1.4700e-003	1.4100e-003	77.2491
Total		0.0802	0.7293	0.6126	4.3700e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0161	880.4935

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Unmitigated	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Total	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Total	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Doris-Patterson
Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	700.00	Student	1.34	58,522.36	0
Junior High School	1,200.00	Student	23.09	141,074.02	0
General Office Building	24.84	1000sqft	0.57	24,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total site size 25 acres

Construction Phase - Construction expected to conclude prior to opening in 2020-2021 school year

Architectural Coating - Low VOC paint at 100 g/L

Vehicle Trips - 1.29 to 1.50, 11.01 to 22.62, 1.62 to 1.61 as calculated from traffic study

Area Coating - Low VOC at 100 g/L

Construction Off-road Equipment Mitigation - Tier 2 engines

Mobile Land Use Mitigation -

Area Mitigation - Mitigation as recorded

Water Mitigation -

Waste Mitigation - 48% reduction in CA

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	370.00	270.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	PhaseEndDate	5/4/2020	6/3/2020
tblConstructionPhase	PhaseStartDate	4/7/2020	5/7/2020
tblLandUse	LotAcreage	3.24	23.09
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Energy	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
Mobile	7.8896	15.7683	69.4560	0.2075	14.8060	0.2279	15.0339	3.9471	0.2103	4.1574		15,937.2703	15,937.2703	0.5709		15,949.2591
Total	14.0026	16.4995	70.2664	0.2119	14.8060	0.2840	15.0900	3.9471	0.2664	4.2135		16,812.8589	16,812.8589	0.5888	0.0160	16,830.1975

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Energy	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
Mobile	7.7964	15.1435	66.9589	0.1975	14.0678	0.2178	14.2855	3.7503	0.2010	3.9512		15,171.3425	15,171.3425	0.5461		15,182.8095
Total	12.9091	15.8746	67.7693	0.2019	14.0678	0.2739	14.3417	3.7503	0.2571	4.0074		16,046.9311	16,046.9311	0.5640	0.0160	16,063.7479

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.81	3.79	3.55	4.71	4.99	3.56	4.96	4.99	3.50	4.89	0.00	4.56	4.56	4.22	0.00	4.55

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2019	2/4/2019	5	25	
2	Grading	Grading	2/5/2019	3/25/2019	5	35	
3	Building Construction	Building Construction	3/26/2019	4/6/2020	5	270	
4	Paving	Paving	5/7/2020	6/3/2020	5	20	
5	Architectural Coating	Architectural Coating	6/4/2020	7/1/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 336,655; Non-Residential Outdoor: 112,218 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	92.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0188	42.5046	34.8088	0.0391		2.1505	2.1505		1.9784	1.9784		3,876.723 3	3,876.723 3	1.2266		3,902.481 0
Total	4.0188	42.5046	34.8088	0.0391	18.0663	2.1505	20.2167	9.9307	1.9784	11.9091		3,876.723 3	3,876.723 3	1.2266		3,902.481 0

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0492	0.0505	0.5850	1.7700e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		131.7725	131.7725	5.8300e-003		131.8949
Total	0.0492	0.0505	0.5850	1.7700e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		131.7725	131.7725	5.8300e-003		131.8949

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	1.2300	34.4240	23.4003	0.0391		0.9611	0.9611		0.9611	0.9611	0.0000	3,876.7233	3,876.7233	1.2266		3,902.4810
Total	1.2300	34.4240	23.4003	0.0391	8.1298	0.9611	9.0909	4.4688	0.9611	5.4299	0.0000	3,876.7233	3,876.7233	1.2266		3,902.4810

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0492	0.0505	0.5850	1.7700e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		131.7725	131.7725	5.8300e-003			131.8949
Total	0.0492	0.0505	0.5850	1.7700e-003	0.1479	1.0800e-003	0.1489	0.0392	1.0000e-003	0.0402		131.7725	131.7725	5.8300e-003			131.8949

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	4.8912	54.1978	40.2888	0.0617		2.5049	2.5049		2.3045	2.3045		6,111.3121	6,111.3121	1.9336			6,151.9167
Total	4.8912	54.1978	40.2888	0.0617	8.6733	2.5049	11.1783	3.5965	2.3045	5.9010		6,111.3121	6,111.3121	1.9336			6,151.9167

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0547	0.0561	0.6500	1.9600e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		146.4139	146.4139	6.4700e-003			146.5499
Total	0.0547	0.0561	0.6500	1.9600e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		146.4139	146.4139	6.4700e-003			146.5499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.9030	0.0000	3.9030	1.6184	0.0000	1.6184			0.0000			0.0000	
Off-Road	1.8922	50.9465	37.9432	0.0617		1.3783	1.3783		1.3783	1.3783	0.0000	6,111.3121	6,111.3121	1.9336			6,151.9167
Total	1.8922	50.9465	37.9432	0.0617	3.9030	1.3783	5.2813	1.6184	1.3783	2.9967	0.0000	6,111.3121	6,111.3121	1.9336			6,151.9167

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0547	0.0561	0.6500	1.9600e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		146.4139	146.4139	6.4700e-003		146.5499
Total	0.0547	0.0561	0.6500	1.9600e-003	0.1643	1.2000e-003	0.1655	0.0436	1.1100e-003	0.0447		146.4139	146.4139	6.4700e-003		146.5499

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479
Total	2.3516	20.9650	17.1204	0.0268		1.2850	1.2850		1.2083	1.2083		2,580.7618	2,580.7618	0.6279		2,593.9479

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2468	2.6649	3.1674	8.2400e-003	0.2436	0.0443	0.2878	0.0693	0.0407	0.1100		788.8396	788.8396	4.9500e-003			788.9436
Worker	0.2514	0.2579	2.9898	9.0200e-003	0.7558	5.5000e-003	0.7613	0.2005	5.1000e-003	0.2056		673.5039	673.5039	0.0298			674.1294
Total	0.4981	2.9228	6.1572	0.0173	0.9994	0.0498	1.0491	0.2697	0.0458	0.3155		1,462.3436	1,462.3436	0.0347			1,463.0729

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,580.7618	2,580.7618	0.6279			2,593.9479

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2468	2.6649	3.1674	8.2400e-003	0.2436	0.0443	0.2878	0.0693	0.0407	0.1100		788.8396	788.8396	4.9500e-003			788.9436
Worker	0.2514	0.2579	2.9898	9.0200e-003	0.7558	5.5000e-003	0.7613	0.2005	5.1000e-003	0.2056		673.5039	673.5039	0.0298			674.1294
Total	0.4981	2.9228	6.1572	0.0173	0.9994	0.0498	1.0491	0.2697	0.0458	0.3155		1,462.3436	1,462.3436	0.0347			1,463.0729

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194			2,555.4880
Total	2.1113	19.0839	16.8084	0.0268		1.1128	1.1128		1.0465	1.0465		2,542.4799	2,542.4799	0.6194			2,555.4880

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2329	2.2282	3.0592	8.2400e-003	0.2437	0.0399	0.2836	0.0693	0.0367	0.1060		771.2974	771.2974	4.8000e-003			771.3983
Worker	0.2368	0.2392	2.7869	9.0200e-003	0.7558	5.4900e-003	0.7613	0.2005	5.0900e-003	0.2056		646.4993	646.4993	0.0282			647.0910
Total	0.4696	2.4674	5.8461	0.0173	0.9994	0.0454	1.0448	0.2698	0.0418	0.3116		1,417.7967	1,417.7967	0.0330			1,418.4883

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,542.4799	2,542.4799	0.6194			2,555.4880
Total	1.0782	23.4615	17.8156	0.0268		0.9016	0.9016		0.9016	0.9016	0.0000	2,542.4799	2,542.4799	0.6194			2,555.4880

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2329	2.2282	3.0592	8.2400e-003	0.2437	0.0399	0.2836	0.0693	0.0367	0.1060		771.2974	771.2974	4.8000e-003			771.3983
Worker	0.2368	0.2392	2.7869	9.0200e-003	0.7558	5.4900e-003	0.7613	0.2005	5.0900e-003	0.2056		646.4993	646.4993	0.0282			647.0910
Total	0.4696	2.4674	5.8461	0.0173	0.9994	0.0454	1.0448	0.2698	0.0418	0.3116		1,417.7967	1,417.7967	0.0330			1,418.4893

3.5 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3301	13.7845	14.3523	0.0223		0.7390	0.7390		0.6799	0.6799		2,160.7571	2,160.7571	0.6988			2,175.4326

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0386	0.0390	0.4544	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		105.4075	105.4075	4.5900e-003			105.5040
Total	0.0386	0.0390	0.4544	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		105.4075	105.4075	4.5900e-003			105.5040

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.9122	19.6998	16.9276	0.0223		0.6542	0.6542		0.6542	0.6542	0.0000	2,160.7571	2,160.7571	0.6988			2,175.4326

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0386	0.0390	0.4544	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		105.4075	105.4075	4.5900e-003			105.5040
Total	0.0386	0.0390	0.4544	1.4700e-003	0.1232	9.0000e-004	0.1241	0.0327	8.3000e-004	0.0335		105.4075	105.4075	4.5900e-003			105.5040

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	104.0263					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218			281.9057
Total	104.2685	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218			281.9057

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0463	0.0468	0.5453	1.7700e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		126.4890	126.4890	5.5100e-003			126.6048
Total	0.0463	0.0468	0.5453	1.7700e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		126.4890	126.4890	5.5100e-003			126.6048

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	104.0263					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1139	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218			281.9057
Total	104.1402	2.3524	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951	0.0000	281.4481	281.4481	0.0218			281.9057

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0463	0.0468	0.5453	1.7700e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		126.4890	126.4890	5.5100e-003			126.6048
Total	0.0463	0.0468	0.5453	1.7700e-003	0.1479	1.0700e-003	0.1489	0.0392	1.0000e-003	0.0402		126.4890	126.4890	5.5100e-003			126.6048

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7964	15.1435	66.9589	0.1975	14.0678	0.2178	14.2855	3.7503	0.2010	3.9512		15,171.3425	15,171.3425	0.5461		15,182.8095
Unmitigated	7.8896	15.7683	69.4560	0.2075	14.8060	0.2279	15.0339	3.9471	0.2103	4.1574		15,937.2703	15,937.2703	0.5709		15,949.2591

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	903.00	0.00	0.00	1,422,186	1,351,276
General Office Building	273.49	58.87	24.34	495,244	470,551
Junior High School	1,944.00	0.00	0.00	3,121,778	2,966,127
Total	3,120.49	58.87	24.34	5,039,208	4,787,953

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475060	0.062670	0.180903	0.157882	0.069305	0.010127	0.013604	0.017861	0.000759	0.000687	0.005630	0.000316	0.005195

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935
NaturalGas Unmitigated	0.0802	0.7293	0.6126	4.3800e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0160	880.4935

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior High School	4796.52	0.0517	0.4703	0.3950	2.8200e-003		0.0357	0.0357		0.0357	0.0357		564.2961	564.2961	0.0108	0.0104	567.7303
Elementary School	1989.76	0.0215	0.1951	0.1639	1.1700e-003		0.0148	0.0148		0.0148	0.0148		234.0894	234.0894	4.4900e-003	4.2900e-003	235.5141
General Office Building	652.645	7.0400e-003	0.0640	0.0538	3.8000e-004		4.8600e-003	4.8600e-003		4.8600e-003	4.8600e-003		76.7818	76.7818	1.4700e-003	1.4100e-003	77.2491
Total		0.0802	0.7293	0.6126	4.3700e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0161	880.4935

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Junior High School	4.79652	0.0517	0.4703	0.3950	2.8200e-003		0.0357	0.0357		0.0357	0.0357		564.2961	564.2961	0.0108	0.0104	567.7303
Elementary School	1.98976	0.0215	0.1951	0.1639	1.1700e-003		0.0148	0.0148		0.0148	0.0148		234.0894	234.0894	4.4900e-003	4.2900e-003	235.5141
General Office Building	0.652645	7.0400e-003	0.0640	0.0538	3.8000e-004		4.8600e-003	4.8600e-003		4.8600e-003	4.8600e-003		76.7818	76.7818	1.4700e-003	1.4100e-003	77.2491
Total		0.0802	0.7293	0.6126	4.3700e-003		0.0554	0.0554		0.0554	0.0554		875.1673	875.1673	0.0168	0.0161	880.4935

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Unmitigated	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2113					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.8029					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Total	6.0328	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5700					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450
Total	5.0325	1.8300e-003	0.1978	1.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004		0.4213	0.4213	1.1300e-003		0.4450

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Doris-Patterson
Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	700.00	Student	1.34	58,522.36	0
Junior High School	1,200.00	Student	23.09	141,074.02	0
General Office Building	24.84	1000sqft	0.57	24,840.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total site size 25 acres

Construction Phase - Construction expected to conclude prior to opening in 2020-2021 school year

Architectural Coating - Low VOC paint at 100 g/L

Vehicle Trips - 1.29 to 1.50, 11.01 to 22.62, 1.62 to 1.61 as calculated from traffic study

Area Coating - Low VOC at 100 g/L

Construction Off-road Equipment Mitigation - Tier 2 engines

Mobile Land Use Mitigation -

Area Mitigation - Mitigation as recorded

Water Mitigation -

Waste Mitigation - 48% reduction in CA

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	370.00	270.00
tblConstructionPhase	NumDays	10.00	25.00
tblConstructionPhase	PhaseEndDate	5/4/2020	6/3/2020
tblConstructionPhase	PhaseStartDate	4/7/2020	5/7/2020
tblLandUse	LotAcreage	3.24	23.09
tblProjectCharacteristics	OperationalYear	2014	2020

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0993	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363
Energy	0.0146	0.1331	0.1118	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	650.6113	650.6113	0.0260	7.4700e-003	653.4722
Mobile	1.0320	2.2063	9.5208	0.0262	1.9003	0.0298	1.9301	0.5074	0.0275	0.5349	0.0000	1,829.4476	1,829.4476	0.0677	0.0000	1,830.8684
Waste						0.0000	0.0000		0.0000	0.0000	75.0762	0.0000	75.0762	4.4369	0.0000	168.2506
Water						0.0000	0.0000		0.0000	0.0000	2.8619	79.8729	82.7349	0.2976	7.7000e-003	91.3720
Total	2.1459	2.3395	9.6504	0.0270	1.9003	0.0400	1.9403	0.5074	0.0377	0.5450	77.9382	2,559.9662	2,637.9043	4.8283	0.0152	2,743.9995

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9167	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363
Energy	0.0146	0.1331	0.1118	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	650.6113	650.6113	0.0260	7.4700e-003	653.4722
Mobile	1.0200	2.1181	9.2132	0.0250	1.8056	0.0285	1.8341	0.4821	0.0263	0.5084	0.0000	1,741.5877	1,741.5877	0.0647	0.0000	1,742.9466
Waste						0.0000	0.0000		0.0000	0.0000	39.0396	0.0000	39.0396	2.3072	0.0000	87.4903
Water						0.0000	0.0000		0.0000	0.0000	2.4155	66.4002	68.8156	0.2511	6.4800e-003	76.0976
Total	1.9513	2.2514	9.3428	0.0258	1.8056	0.0387	1.8443	0.4821	0.0365	0.5185	41.4551	2,458.6335	2,500.0886	2.6491	0.0140	2,560.0430

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	9.07	3.77	3.19	4.66	4.99	3.30	4.95	4.99	3.24	4.86	46.81	3.96	5.22	45.13	8.04	6.70

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2019	2/4/2019	5	25	
2	Grading	Grading	2/5/2019	3/25/2019	5	35	
3	Building Construction	Building Construction	3/26/2019	4/6/2020	5	270	
4	Paving	Paving	5/7/2020	6/3/2020	5	20	
5	Architectural Coating	Architectural Coating	6/4/2020	7/1/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 87.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 336,655; Non-Residential Outdoor: 112,218 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	92.00	37.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2258	0.0000	0.2258	0.1241	0.0000	0.1241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0502	0.5313	0.4351	4.9000e-004		0.0269	0.0269		0.0247	0.0247	0.0000	43.9613	43.9613	0.0139	0.0000	44.2534
Total	0.0502	0.5313	0.4351	4.9000e-004	0.2258	0.0269	0.2527	0.1241	0.0247	0.1489	0.0000	43.9613	43.9613	0.0139	0.0000	44.2534

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	7.2000e-004	7.1400e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4339	1.4339	7.0000e-005	0.0000	1.4352
Total	6.0000e-004	7.2000e-004	7.1400e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4339	1.4339	7.0000e-005	0.0000	1.4352

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1016	0.0000	0.1016	0.0559	0.0000	0.0559	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.4303	0.2925	4.9000e-004		0.0120	0.0120		0.0120	0.0120	0.0000	43.9613	43.9613	0.0139	0.0000	44.2533
Total	0.0154	0.4303	0.2925	4.9000e-004	0.1016	0.0120	0.1136	0.0559	0.0120	0.0679	0.0000	43.9613	43.9613	0.0139	0.0000	44.2533

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	7.2000e-004	7.1400e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4339	1.4339	7.0000e-005	0.0000	1.4352
Total	6.0000e-004	7.2000e-004	7.1400e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4339	1.4339	7.0000e-005	0.0000	1.4352

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1518	0.0000	0.1518	0.0629	0.0000	0.0629	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0856	0.9485	0.7051	1.0800e-003		0.0438	0.0438		0.0403	0.0403	0.0000	97.0216	97.0216	0.0307	0.0000	97.6662
Total	0.0856	0.9485	0.7051	1.0800e-003	0.1518	0.0438	0.1956	0.0629	0.0403	0.1033	0.0000	97.0216	97.0216	0.0307	0.0000	97.6662

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	1.1100e-003	0.0111	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.2304	2.2304	1.0000e-004	0.0000	2.2326
Total	9.4000e-004	1.1100e-003	0.0111	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.2304	2.2304	1.0000e-004	0.0000	2.2326

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0683	0.0000	0.0683	0.0283	0.0000	0.0283	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.8916	0.6640	1.0800e-003		0.0241	0.0241		0.0241	0.0241	0.0000	97.0214	97.0214	0.0307	0.0000	97.6661
Total	0.0331	0.8916	0.6640	1.0800e-003	0.0683	0.0241	0.0924	0.0283	0.0241	0.0524	0.0000	97.0214	97.0214	0.0307	0.0000	97.6661

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4000e-004	1.1100e-003	0.0111	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.2304	2.2304	1.0000e-004	0.0000	2.2326
Total	9.4000e-004	1.1100e-003	0.0111	3.0000e-005	2.8200e-003	2.0000e-005	2.8400e-003	7.5000e-004	2.0000e-005	7.7000e-004	0.0000	2.2304	2.2304	1.0000e-004	0.0000	2.2326

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2363	2.1070	1.7206	2.6900e-003		0.1292	0.1292		0.1214	0.1214	0.0000	235.2934	235.2934	0.0573	0.0000	236.4956
Total	0.2363	2.1070	1.7206	2.6900e-003		0.1292	0.1292		0.1214	0.1214	0.0000	235.2934	235.2934	0.0573	0.0000	236.4956

3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0268	0.2775	0.3947	8.3000e-004	0.0241	4.4700e-003	0.0286	6.8700e-003	4.1100e-003	0.0110	0.0000	71.6726	71.6726	4.6000e-004	0.0000	71.6822
Worker	0.0249	0.0294	0.2934	8.7000e-004	0.0746	5.5000e-004	0.0751	0.0198	5.1000e-004	0.0203	0.0000	58.9216	58.9216	2.7200e-003	0.0000	58.9786
Total	0.0517	0.3069	0.6881	1.7000e-003	0.0987	5.0200e-003	0.1037	0.0267	4.6200e-003	0.0313	0.0000	130.5942	130.5942	3.1800e-003	0.0000	130.6609

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1084	2.3579	1.7905	2.6900e-003		0.0906	0.0906		0.0906	0.0906	0.0000	235.2931	235.2931	0.0573	0.0000	236.4953
Total	0.1084	2.3579	1.7905	2.6900e-003		0.0906	0.0906		0.0906	0.0906	0.0000	235.2931	235.2931	0.0573	0.0000	236.4953

3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0268	0.2775	0.3947	8.3000e-004	0.0241	4.4700e-003	0.0286	6.8700e-003	4.1100e-003	0.0110	0.0000	71.6726	71.6726	4.6000e-004	0.0000	71.6822
Worker	0.0249	0.0294	0.2934	8.7000e-004	0.0746	5.5000e-004	0.0751	0.0198	5.1000e-004	0.0203	0.0000	58.9216	58.9216	2.7200e-003	0.0000	58.9786
Total	0.0517	0.3069	0.6881	1.7000e-003	0.0987	5.0200e-003	0.1037	0.0267	4.6200e-003	0.0313	0.0000	130.5942	130.5942	3.1800e-003	0.0000	130.6609

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0728	0.6584	0.5799	9.2000e-004		0.0384	0.0384		0.0361	0.0361	0.0000	79.5742	79.5742	0.0194	0.0000	79.9813
Total	0.0728	0.6584	0.5799	9.2000e-004		0.0384	0.0384		0.0361	0.0361	0.0000	79.5742	79.5742	0.0194	0.0000	79.9813

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6800e-003	0.0796	0.1315	2.8000e-004	8.2800e-003	1.3800e-003	9.6600e-003	2.3600e-003	1.2700e-003	3.6300e-003	0.0000	24.0566	24.0566	1.5000e-004	0.0000	24.0598	
Worker	8.0300e-003	9.3600e-003	0.0937	3.0000e-004	0.0256	1.9000e-004	0.0258	6.8000e-003	1.8000e-004	6.9700e-003	0.0000	19.4151	19.4151	8.8000e-004	0.0000	19.4336	
Total	0.0167	0.0889	0.2252	5.8000e-004	0.0339	1.5700e-003	0.0354	9.1600e-003	1.4500e-003	0.0106	0.0000	43.4717	43.4717	1.0300e-003	0.0000	43.4934	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0372	0.8094	0.6146	9.2000e-004		0.0311	0.0311		0.0311	0.0311	0.0000	79.5741	79.5741	0.0194	0.0000	79.9813	
Total	0.0372	0.8094	0.6146	9.2000e-004		0.0311	0.0311		0.0311	0.0311	0.0000	79.5741	79.5741	0.0194	0.0000	79.9813	

3.4 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.6800e-003	0.0796	0.1315	2.8000e-004	8.2800e-003	1.3800e-003	9.6600e-003	2.3600e-003	1.2700e-003	3.6300e-003	0.0000	24.0566	24.0566	1.5000e-004	0.0000	24.0598
Worker	8.0300e-003	9.3600e-003	0.0937	3.0000e-004	0.0256	1.9000e-004	0.0258	6.8000e-003	1.8000e-004	6.9700e-003	0.0000	19.4151	19.4151	8.8000e-004	0.0000	19.4336
Total	0.0167	0.0889	0.2252	5.8000e-004	0.0339	1.5700e-003	0.0354	9.1600e-003	1.4500e-003	0.0106	0.0000	43.4717	43.4717	1.0300e-003	0.0000	43.4934

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0133	0.1378	0.1435	2.2000e-004		7.3900e-003	7.3900e-003		6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	19.7352
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0133	0.1378	0.1435	2.2000e-004		7.3900e-003	7.3900e-003		6.8000e-003	6.8000e-003	0.0000	19.6021	19.6021	6.3400e-003	0.0000	19.7352

3.5 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	4.4000e-004	4.4300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9175	0.9175	4.0000e-005	0.0000	0.9184
Total	3.8000e-004	4.4000e-004	4.4300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9175	0.9175	4.0000e-005	0.0000	0.9184

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1200e-003	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1200e-003	0.1970	0.1693	2.2000e-004		6.5400e-003	6.5400e-003		6.5400e-003	6.5400e-003	0.0000	19.6020	19.6020	6.3400e-003	0.0000	19.7352

3.5 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	4.4000e-004	4.4300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9175	0.9175	4.0000e-005	0.0000	0.9184
Total	3.8000e-004	4.4000e-004	4.4300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9175	0.9175	4.0000e-005	0.0000	0.9184

3.6 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574
Total	1.0427	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574

3.6 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	5.3000e-004	5.3100e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.1010	1.1010	5.0000e-005	0.0000	1.1021	
Total	4.6000e-004	5.3000e-004	5.3100e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.1010	1.1010	5.0000e-005	0.0000	1.1021	

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Archit. Coating	1.0403					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1400e-003	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574	
Total	1.0414	0.0235	0.0183	3.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5574	

3.6 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	5.3000e-004	5.3100e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.1010	1.1010	5.0000e-005	0.0000	1.1021	
Total	4.6000e-004	5.3000e-004	5.3100e-003	2.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.1010	1.1010	5.0000e-005	0.0000	1.1021	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0200	2.1181	9.2132	0.0250	1.8056	0.0285	1.8341	0.4821	0.0263	0.5084	0.0000	1,741.5877	1,741.5877	0.0647	0.0000	1,742.9466
Unmitigated	1.0320	2.2063	9.5208	0.0262	1.9003	0.0298	1.9301	0.5074	0.0275	0.5349	0.0000	1,829.4476	1,829.4476	0.0677	0.0000	1,830.8684

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	903.00	0.00	0.00	1,422,186	1,351,276
General Office Building	273.49	58.87	24.34	495,244	470,551
Junior High School	1,944.00	0.00	0.00	3,121,778	2,966,127
Total	3,120.49	58.87	24.34	5,039,208	4,787,953

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475060	0.062670	0.180903	0.157882	0.069305	0.010127	0.013604	0.017861	0.000759	0.000687	0.005630	0.000316	0.005195

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	505.7175	505.7175	0.0233	4.8100e-003	507.6966
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	505.7175	505.7175	0.0233	4.8100e-003	507.6966
NaturalGas Mitigated	0.0146	0.1331	0.1118	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.8938	144.8938	2.7800e-003	2.6600e-003	145.7756
NaturalGas Unmitigated	0.0146	0.1331	0.1118	8.0000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.8938	144.8938	2.7800e-003	2.6600e-003	145.7756

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior High School	1.75073e+006	9.4400e-003	0.0858	0.0721	5.1000e-004		6.5200e-003	6.5200e-003		6.5200e-003	6.5200e-003	0.0000	93.4255	93.4255	1.7900e-003	1.7100e-003	93.9941
Elementary School	726262	3.9200e-003	0.0356	0.0299	2.1000e-004		2.7100e-003	2.7100e-003		2.7100e-003	2.7100e-003	0.0000	38.7561	38.7561	7.4000e-004	7.1000e-004	38.9920
General Office Building	238216	1.2800e-003	0.0117	9.8100e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.7121	12.7121	2.4000e-004	2.3000e-004	12.7895
Total		0.0146	0.1331	0.1118	7.9000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.8938	144.8938	2.7700e-003	2.6500e-003	145.7756

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Junior High School	1.75073e+006	9.4400e-003	0.0858	0.0721	5.1000e-004		6.5200e-003	6.5200e-003		6.5200e-003	6.5200e-003	0.0000	93.4255	93.4255	1.7900e-003	1.7100e-003	93.9941
Elementary School	726262	3.9200e-003	0.0356	0.0299	2.1000e-004		2.7100e-003	2.7100e-003		2.7100e-003	2.7100e-003	0.0000	38.7561	38.7561	7.4000e-004	7.1000e-004	38.9920
General Office Building	238216	1.2800e-003	0.0117	9.8100e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004	0.0000	12.7121	12.7121	2.4000e-004	2.3000e-004	12.7895
Total		0.0146	0.1331	0.1118	7.9000e-004		0.0101	0.0101		0.0101	0.0101	0.0000	144.8938	144.8938	2.7700e-003	2.6500e-003	145.7756

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	404390	115.7229	5.3200e-003	1.1000e-003	116.1758
General Office Building	388001	111.0330	5.1000e-003	1.0600e-003	111.4675
Junior High School	974821	278.9616	0.0128	2.6500e-003	280.0534
Total		505.7175	0.0232	4.8100e-003	507.6966

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	404390	115.7229	5.3200e-003	1.1000e-003	116.1758
General Office Building	388001	111.0330	5.1000e-003	1.0600e-003	111.4675
Junior High School	974821	278.9616	0.0128	2.6500e-003	280.0534
Total		505.7175	0.0232	4.8100e-003	507.6966

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9167	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363
Unmitigated	1.0993	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2211					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8765					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363
Total	1.0993	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1040					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8110					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363
Total	0.9167	1.6000e-004	0.0178	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0344	0.0344	9.0000e-005	0.0000	0.0363

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	68.8156	0.2511	6.4800e-003	76.0976
Unmitigated	82.7349	0.2976	7.7000e-003	91.3720

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.69697 / 4.36363	20.7349	0.0562	1.5000e-003	22.3799
General Office Building	4.41491 / 2.70591	26.4543	0.1450	3.6400e-003	30.6264
Junior High School	2.90909 / 7.48051	35.5456	0.0964	2.5700e-003	38.3656
Total		82.7349	0.2976	7.7100e-003	91.3720

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	1.43224 / 3.58739	17.1966	0.0474	1.2600e-003	18.5831
General Office Building	3.72618 / 2.22456	22.1391	0.1224	3.0600e-003	25.6578
Junior High School	2.45527 / 6.14981	29.4799	0.0813	2.1600e-003	31.8567
Total		68.8156	0.2511	6.4800e-003	76.0976

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	39.0396	2.3072	0.0000	87.4903
Unmitigated	75.0762	4.4369	0.0000	168.2506

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	127.75	25.9321	1.5325	0.0000	58.1155
General Office Building	23.1	4.6891	0.2771	0.0000	10.5086
Junior High School	219	44.4550	2.6272	0.0000	99.6266
Total		75.0762	4.4369	0.0000	168.2506

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	66.43	13.4847	0.7969	0.0000	30.2201
General Office Building	12.012	2.4383	0.1441	0.0000	5.4645
Junior High School	113.88	23.1166	1.3662	0.0000	51.8058
Total		39.0396	2.3072	0.0000	87.4903

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

TIER 2 SCREENING RISK ASSESSMENT REPORT
 (Version 8.0 & Attachment M, Revision Mar 2016) - RiskTool (V1.03)

A/N: N/A
 Fac: Doris-Patterson

Application deemed complete date: 8/30/2020

2. Tier 2 Data

Equipment Type Diesel ICE With T-BACT
 Operation Schedule 8 hours/day; 5 days/week; 48 weeks/year
 Stack Height 8 ft
 Distance - Residential 170 m
 Distance - Commercial 1000 m
 Meteorological Station Reseda

Dispersion Factors tables	Point Source
For Chronic X/Q	Table 2
For Acute X/Q max	Table 6

Dilution Factors

Receptor	X/Q ($\mu\text{g}/\text{m}^3$)/(tons/yr)	X/Qmax ($\mu\text{g}/\text{m}^3$)/(lbs/hr)
Residential	0.316	23.481
Commercial - Worker	0.010	3.364

Adjustment and Intake Factors

	Residential	Worker
Year of Exposure	2	
Combined Exposure Factor (CEF) - Table 9.1 & 9.2	310.99	4.50
Worker Adjustment Factor (WAF) - Table 10	1	4.20

TIER 2 RESULTS

A/N: N/A

Application deemed complete date:

08/30/20

5a. MICR

MICR Resident = CP (mg/(kg-day))⁻¹ * Q (ton/yr) * (X/Q) Resident * CEF Resident * MP Resident * 1e-6 * MWAF

MICR Worker = CP (mg/(kg-day))⁻¹ * Q (ton/yr) * (X/Q) Worker * CEF Worker * MP Worker * WAF Worker * 1e-6 * MWAF

Compound	Residential	Commercial
Particulate Emissions from Diesel-Fueled Engines	6.19E-06	1.19E-08
Total	6.19E-06	1.19E-08
	PASS	PASS

5b. Cancer Burden Calculation?	YES
X/Q for one-in-a-million (µg/m³)/(tons/yr):	5.11E-02
New Distance at which MICR is 1 in a million (m):	344.70
Zone Impact Area (km²):	3.73E-01
Population (7000 person/km²):	2.61E+03
Cancer Burden:	1.62E-02
	PASS

6. Hazard Index

HIA = [Q(lb/hr) * (X/Q)max * MWAF] / Acute REL

HIC = [Q(ton/yr) * (X/Q) * MP * MWAF] / Chronic REL

HIC 8-hr= [Q(ton/yr) * (X/Q) * WAF * MWAF] / 8-hr Chronic REL

A/N: N/A

Application deemed complete date: 08/30/20

Target Organs	Acute	Chronic	8-hr Chronic	Acute Pass/Fail	Chronic Pass/Fail	8-hr Chronic Pass/Fail
Alimentary system (liver) - AL				Pass	Pass	Pass
Bones and teeth - BN				Pass	Pass	Pass
Cardiovascular system - CV				Pass	Pass	Pass
Developmental - DEV				Pass	Pass	Pass
Endocrine system - END				Pass	Pass	Pass
Eye				Pass	Pass	Pass
Hematopoietic system - HEM				Pass	Pass	Pass
Immune system - IMM				Pass	Pass	Pass
Kidney - KID				Pass	Pass	Pass
Nervous system - NS				Pass	Pass	Pass
Reproductive system - REP				Pass	Pass	Pass
Respiratory system - RES		3.62E-03		Pass	Pass	Pass
Skin				Pass	Pass	Pass

6a. Hazard Index Acute - Resident

HIA = [Q(lb/hr) * (X/Q)max resident * MWF] / Acute REL

Compound	HIA - Residential									
	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Particulate Emissions from Diesel-Fueled Engines										
Total										

6a. Hazard Index Acute - Worker

A/N: N/A

Application deemed complete date: 08/30/20

HIA = [Q(lb/hr) * (X/Q)max Worker * MWAF] / Acute REL

Compound	HIA - Commercial									
	AL	CV	DEV	EYE	HEM	IMM	NS	REP	RESP	SKIN
Particulate Emissions from Diesel-Fueled Engines										
Total										

6b. Hazard Index Chronic - Resident

HIC = [Q(ton/yr) * (X/Q) Resident * MP Chronic Resident * MWAFF] / Chronic REL

Compound	HIC - Residential											RESP	SKIN
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP		
Particulate Emissions from Diesel-Fueled Engines												3.62E-03	
Total												3.62E-03	

6b. Hazard Index Chronic - Worker

HIC = [Q(ton/yr) * (X/Q) * MP Chronic Worker * MWAF] / Chronic REL

Compound	HIC - Commercial												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Particulate Emissions from Diesel-Fueled Engines												1.15E-04	
Total												1.15E-04	

6c. 8-hour Hazard Index Chronic - Resident

A/N: N/A

Application deemed complete date: 08/30/20

HIC 8-hr = [Q(ton/yr) * (X/Q) Resident * WAF Resident * MWAF] / 8-hr Chronic REL

Compound	HIC - Residential												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Particulate Emissions from Diesel-Fueled Engines													
Total													

6c. 8-hour Hazard Index Chronic - Worker

HIC 8-hr = [Q(ton/yr) * (X/Q) Worker * WAF Worker * MWAFF] / 8-hr Chronic REL

Compound	HIC - Commercial												
	AL	BN	CV	DEV	END	EYE	HEM	IMM	KID	NS	REP	RESP	SKIN
Particulate Emissions from Diesel-Fueled Engines													
Total													

Dori s. dat. out

4. Resi dent	*	1733	30	1.8
5. Bussi nes	*	530	-1160	1.8
6. Bussi nes	*	560	-1250	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * * *	BRG (DEG)	* * * *	PRED CONC (PPM)	* * * *	CONC/LI NK (PPM)							
						A	B	C	D	E	F	G	H
1. DP Schoo	*	310.	*	1.5	*	0.1	0.4	0.0	0.0	0.0	0.1	0.0	0.4
2. Resi denc	*	196.	*	4.1	*	0.0	2.3	0.1	0.1	0.1	1.4	0.0	0.0
3. Hi gh Sch	*	286.	*	1.8	*	0.5	0.1	0.0	0.0	0.0	1.2	0.0	0.0
4. Resi dent	*	227.	*	1.8	*	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.3
5. Bussi nes	*	195.	*	4.7	*	0.0	0.0	0.0	0.4	3.4	0.0	0.0	0.0
6. Bussi nes	*	346.	*	3.5	*	0.0	0.2	0.3	2.2	0.0	0.0	0.0	0.0

RECEPTOR	* * * *	CONC/LI NK (PPM)									
		I	J	K	L	M	N	O	P	Q	R
1. DP Schoo	*	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.3
2. Resi denc	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Hi gh Sch	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Resi dent	*	0.0	0.1	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.4
5. Bussi nes	*	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
6. Bussi nes	*	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0

Doris Patterson Emfac Output Results

calendar_year	season_month	sub_area	vehicle_class	temperature	relative_humidity	process	speed_time	pollutant	emission_rate (g/mi)
2020	Winter	Ventura (SCC)	LDA	60	70	RUNEX	25	CO	0.788655
2020	Winter	Ventura (SCC)	LDA	60	70	RUNEX	30	CO	0.723368
2020	Winter	Ventura (SCC)	LDA	60	70	RUNEX	40	CO	0.617481
2020	Winter	Ventura (SCC)	LDA	60	70	RUNEX	45	CO	0.574642
2020	Winter	Ventura (SCC)	LDA	60	70	RUNEX	55	CO	0.505894
2020	Winter	Ventura (SCC)	LDT1	60	70	RUNEX	25	CO	1.872307
2020	Winter	Ventura (SCC)	LDT1	60	70	RUNEX	30	CO	1.70298
2020	Winter	Ventura (SCC)	LDT1	60	70	RUNEX	40	CO	1.449729
2020	Winter	Ventura (SCC)	LDT1	60	70	RUNEX	45	CO	1.357196
2020	Winter	Ventura (SCC)	LDT1	60	70	RUNEX	55	CO	1.230339
2020	Winter	Ventura (SCC)	LDT2	60	70	RUNEX	25	CO	0.999214
2020	Winter	Ventura (SCC)	LDT2	60	70	RUNEX	30	CO	0.917002
2020	Winter	Ventura (SCC)	LDT2	60	70	RUNEX	40	CO	0.782764
2020	Winter	Ventura (SCC)	LDT2	60	70	RUNEX	45	CO	0.728111
2020	Winter	Ventura (SCC)	LDT2	60	70	RUNEX	55	CO	0.639495
2020	Winter	Ventura (SCC)	LHD1	60	70	RUNEX	25	CO	1.26056
2020	Winter	Ventura (SCC)	LHD1	60	70	RUNEX	30	CO	1.115026
2020	Winter	Ventura (SCC)	LHD1	60	70	RUNEX	40	CO	0.966679
2020	Winter	Ventura (SCC)	LHD1	60	70	RUNEX	45	CO	0.947498
2020	Winter	Ventura (SCC)	LHD1	60	70	RUNEX	55	CO	1.023414
2020	Winter	Ventura (SCC)	LHD2	60	70	RUNEX	25	CO	0.587802
2020	Winter	Ventura (SCC)	LHD2	60	70	RUNEX	30	CO	0.509647
2020	Winter	Ventura (SCC)	LHD2	60	70	RUNEX	40	CO	0.429514
2020	Winter	Ventura (SCC)	LHD2	60	70	RUNEX	45	CO	0.416148
2020	Winter	Ventura (SCC)	LHD2	60	70	RUNEX	55	CO	0.440137
2020	Winter	Ventura (SCC)	MCY	60	70	RUNEX	25	CO	23.01662
2020	Winter	Ventura (SCC)	MCY	60	70	RUNEX	30	CO	20.49253
2020	Winter	Ventura (SCC)	MCY	60	70	RUNEX	40	CO	17.98684
2020	Winter	Ventura (SCC)	MCY	60	70	RUNEX	45	CO	17.75734
2020	Winter	Ventura (SCC)	MCY	60	70	RUNEX	55	CO	19.51042
2020	Winter	Ventura (SCC)	MDV	60	70	RUNEX	25	CO	1.810765
2020	Winter	Ventura (SCC)	MDV	60	70	RUNEX	30	CO	1.652753
2020	Winter	Ventura (SCC)	MDV	60	70	RUNEX	40	CO	1.416306
2020	Winter	Ventura (SCC)	MDV	60	70	RUNEX	45	CO	1.330399
2020	Winter	Ventura (SCC)	MDV	60	70	RUNEX	55	CO	1.218581
2020	Winter	Ventura (SCC)	MH	60	70	RUNEX	25	CO	4.190974
2020	Winter	Ventura (SCC)	MH	60	70	RUNEX	30	CO	3.720479
2020	Winter	Ventura (SCC)	MH	60	70	RUNEX	40	CO	3.258962
2020	Winter	Ventura (SCC)	MH	60	70	RUNEX	45	CO	3.221468
2020	Winter	Ventura (SCC)	MH	60	70	RUNEX	55	CO	3.563919
2020	Winter	Ventura (SCC)	OBUS	60	70	RUNEX	25	CO	1.530371
2020	Winter	Ventura (SCC)	OBUS	60	70	RUNEX	30	CO	1.404941
2020	Winter	Ventura (SCC)	OBUS	60	70	RUNEX	40	CO	1.203045
2020	Winter	Ventura (SCC)	OBUS	60	70	RUNEX	45	CO	1.122494
2020	Winter	Ventura (SCC)	OBUS	60	70	RUNEX	55	CO	0.997659
2020	Winter	Ventura (SCC)	SBUS	60	70	RUNEX	25	CO	0.973675
2020	Winter	Ventura (SCC)	SBUS	60	70	RUNEX	30	CO	0.858759

Doris Patterson Emfac Output Results

calendar_year	season_month	sub_area	vehicle_class	temperature	relative_humidity	process	speed_time	pollutant	emission_rate (g/mi)
2020	Winter	Ventura (SCC)	SBUS	60	70	RUNEX	40	CO	0.685313
2020	Winter	Ventura (SCC)	SBUS	60	70	RUNEX	45	CO	0.620954
2020	Winter	Ventura (SCC)	SBUS	60	70	RUNEX	55	CO	0.527236
2020	Winter	Ventura (SCC)	T6 Ag	60	70	RUNEX	25	CO	2.230272
2020	Winter	Ventura (SCC)	T6 Ag	60	70	RUNEX	30	CO	1.861309
2020	Winter	Ventura (SCC)	T6 Ag	60	70	RUNEX	40	CO	1.31373
2020	Winter	Ventura (SCC)	T6 Ag	60	70	RUNEX	45	CO	1.126211
2020	Winter	Ventura (SCC)	T6 Ag	60	70	RUNEX	55	CO	0.910138
2020	Winter	Ventura (SCC)	T6 Public	60	70	RUNEX	25	CO	0.311663
2020	Winter	Ventura (SCC)	T6 Public	60	70	RUNEX	30	CO	0.242626
2020	Winter	Ventura (SCC)	T6 Public	60	70	RUNEX	40	CO	0.151009
2020	Winter	Ventura (SCC)	T6 Public	60	70	RUNEX	45	CO	0.121983
2020	Winter	Ventura (SCC)	T6 Public	60	70	RUNEX	55	CO	0.087246
2020	Winter	Ventura (SCC)	T6 Utility	60	70	RUNEX	25	CO	0.290089
2020	Winter	Ventura (SCC)	T6 Utility	60	70	RUNEX	30	CO	0.213774
2020	Winter	Ventura (SCC)	T6 Utility	60	70	RUNEX	40	CO	0.116093
2020	Winter	Ventura (SCC)	T6 Utility	60	70	RUNEX	45	CO	0.085552
2020	Winter	Ventura (SCC)	T6 Utility	60	70	RUNEX	55	CO	0.04646
2020	Winter	Ventura (SCC)	T7 SWCV	60	70	RUNEX	25	CO	7.456263
2020	Winter	Ventura (SCC)	T7 SWCV	60	70	RUNEX	30	CO	5.501839
2020	Winter	Ventura (SCC)	T7 SWCV	60	70	RUNEX	40	CO	2.998484
2020	Winter	Ventura (SCC)	T7 SWCV	60	70	RUNEX	45	CO	2.215739
2020	Winter	Ventura (SCC)	T7 SWCV	60	70	RUNEX	55	CO	1.215732
2020	Winter	Ventura (SCC)	UBUS	60	70	RUNEX	25	CO	6.051383
2020	Winter	Ventura (SCC)	UBUS	60	70	RUNEX	30	CO	5.242881
2020	Winter	Ventura (SCC)	UBUS	60	70	RUNEX	40	CO	4.196209
2020	Winter	Ventura (SCC)	UBUS	60	70	RUNEX	45	CO	3.876804
2020	Winter	Ventura (SCC)	UBUS	60	70	RUNEX	55	CO	3.565757

**D CULTURAL RESOURCES (RECORDS SEARCH AND
NATIVE AMERICAN CONSULTATION)**

South Central Coastal Information Center

California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
sccic@fullerton.edu

California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

8/17/2017

Records Search File No.: 17953.4033

Jenna Farrell
Tetra Tech, Inc.
2969 Prospect Park Dr., Ste. 100
Rancho Cordova, CA 95670

Re: Record Search Results for Oxnard School District Project

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Oxnard, CA USGS 7.5' quadrangle. The following reflects the results of the records search for the project area and a 1-mile radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: custom GIS maps shape files hand-drawn maps

Resources within project area: 0	None
Resources within 1-mile radius: 2	SEE ATTACHED LIST
Resources listed in the OHP Historic Properties Directory within project area: 0	None
Resources listed in the OHP Historic Properties Directory within 1-mile radius: 4	SEE ATTACHED LIST FOR INDIVIDUAL PROPERTY STATUS CODES – resource locations from the OHP HPD may or may not be plotted on the custom GIS map or provided as a shape file
Resources listed in the Historic Properties Directory that lack specific locational information: 3	SEE ATTACHED LIST FOR INDIVIDUAL PROPERTY STATUS CODES - These properties may or may not be in your project area or in the search radius.
Reports within project area: 1	VN-02978
Reports within 1-mile radius: 32	SEE ATTACHED MAP or LIST. 1 is an overview report.

Resource Database Printout (list):

enclosed not requested nothing listed

Resource Database Printout (details):

enclosed not requested nothing listed

Resource Digital Database (spreadsheet):

enclosed not requested nothing listed

Report Database Printout (list):

enclosed not requested nothing listed

Report Database Printout (details):

enclosed not requested nothing listed

Report Digital Database (spreadsheet):

enclosed not requested nothing listed

<u>Resource Record Copies:</u>	<input checked="" type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input type="checkbox"/> nothing listed
<u>Report Copies:</u>	<input checked="" type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input type="checkbox"/> nothing listed
<u>OHP Historic Properties Directory:</u>	<input checked="" type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input type="checkbox"/> nothing listed
<u>Archaeological Determinations of Eligibility:</u>	<input type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input checked="" type="checkbox"/> nothing listed
<u>Los Angeles Historic-Cultural Monuments</u>	<input type="checkbox"/> enclosed	<input type="checkbox"/> not requested	<input checked="" type="checkbox"/> nothing listed
<u>Historical Maps:</u>	<input type="checkbox"/> enclosed	<input checked="" type="checkbox"/> not requested	<input type="checkbox"/> nothing listed
<u>Ethnographic Information:</u>	<input checked="" type="checkbox"/> not available at SCCIC		
<u>Historical Literature:</u>	<input checked="" type="checkbox"/> not available at SCCIC		
<u>GLO and/or Rancho Plat Maps:</u>	<input checked="" type="checkbox"/> not available at SCCIC		
<u>Caltrans Bridge Survey:</u>	<input checked="" type="checkbox"/> not available at SCCIC; please go to http://www.dot.ca.gov/hq/structur/strmaint/historic.htm		
<u>Shipwreck Inventory:</u>	<input checked="" type="checkbox"/> not available at SCCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp		
<u>Soil Survey Maps: (see below)</u>	<input checked="" type="checkbox"/> not available at SCCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx		

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

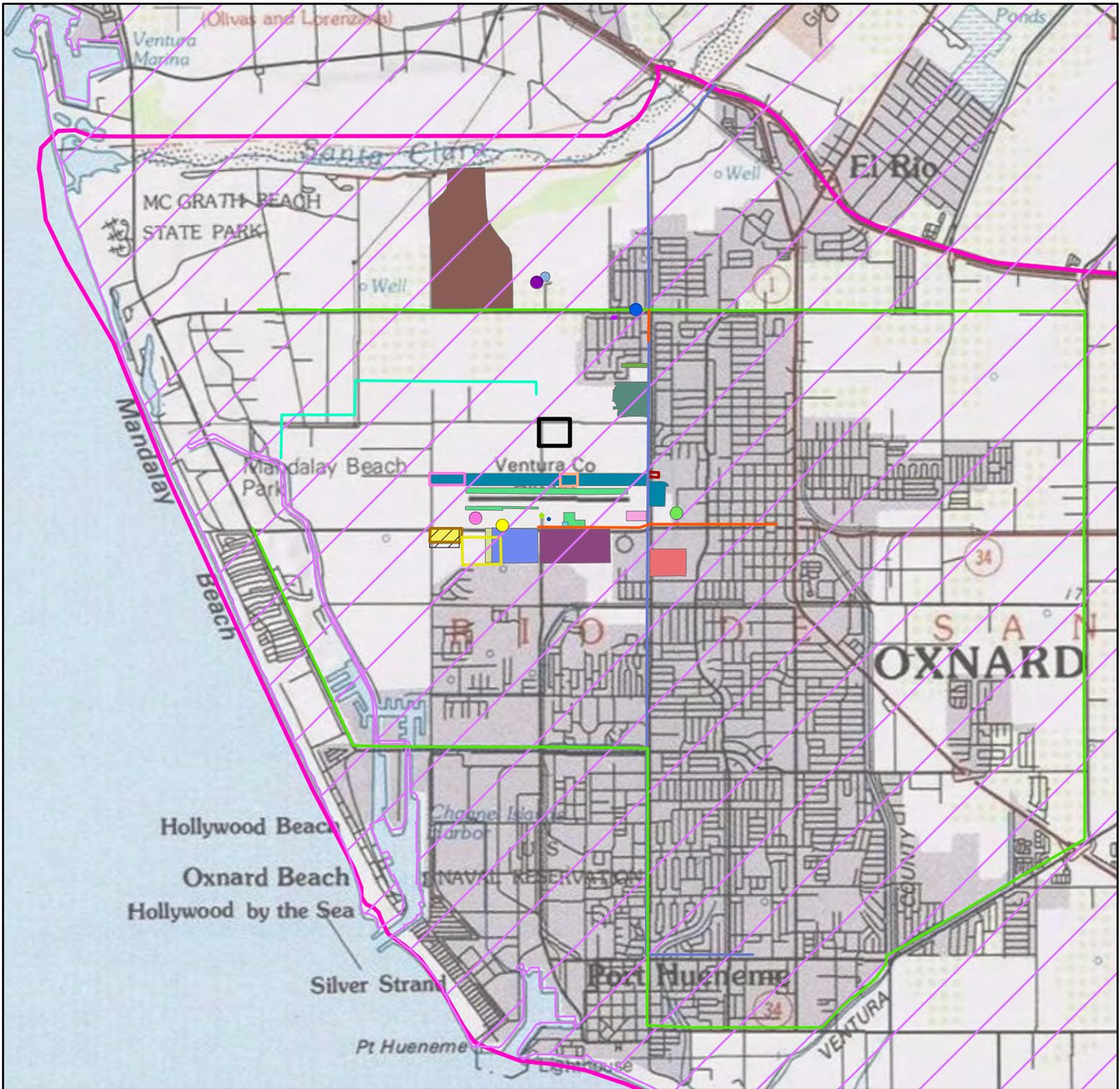
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,


 For Isabela Kott
 GIS Technician/Staff Researcher

Enclosures:

- (X) GIS Shapefiles – 35 shapes**
- (X) Resource Database Printout (list) – 1 page**
- (X) Resource Database Printout (details) – 5 pages**
- (X) Report Database Printout (list) – 3 pages**
- (X) Report Database Printout (details) – 34 pages**
- (X) Resource Record Copies – (all) 104 pages**
- (X) Report Copies – (all) 740 pages**
- (X) OHP Historic Properties Directory – 3 pages**
- (X) National Register Status Codes – 1 page**
- (X) Invoice #17953.4033**



Legend

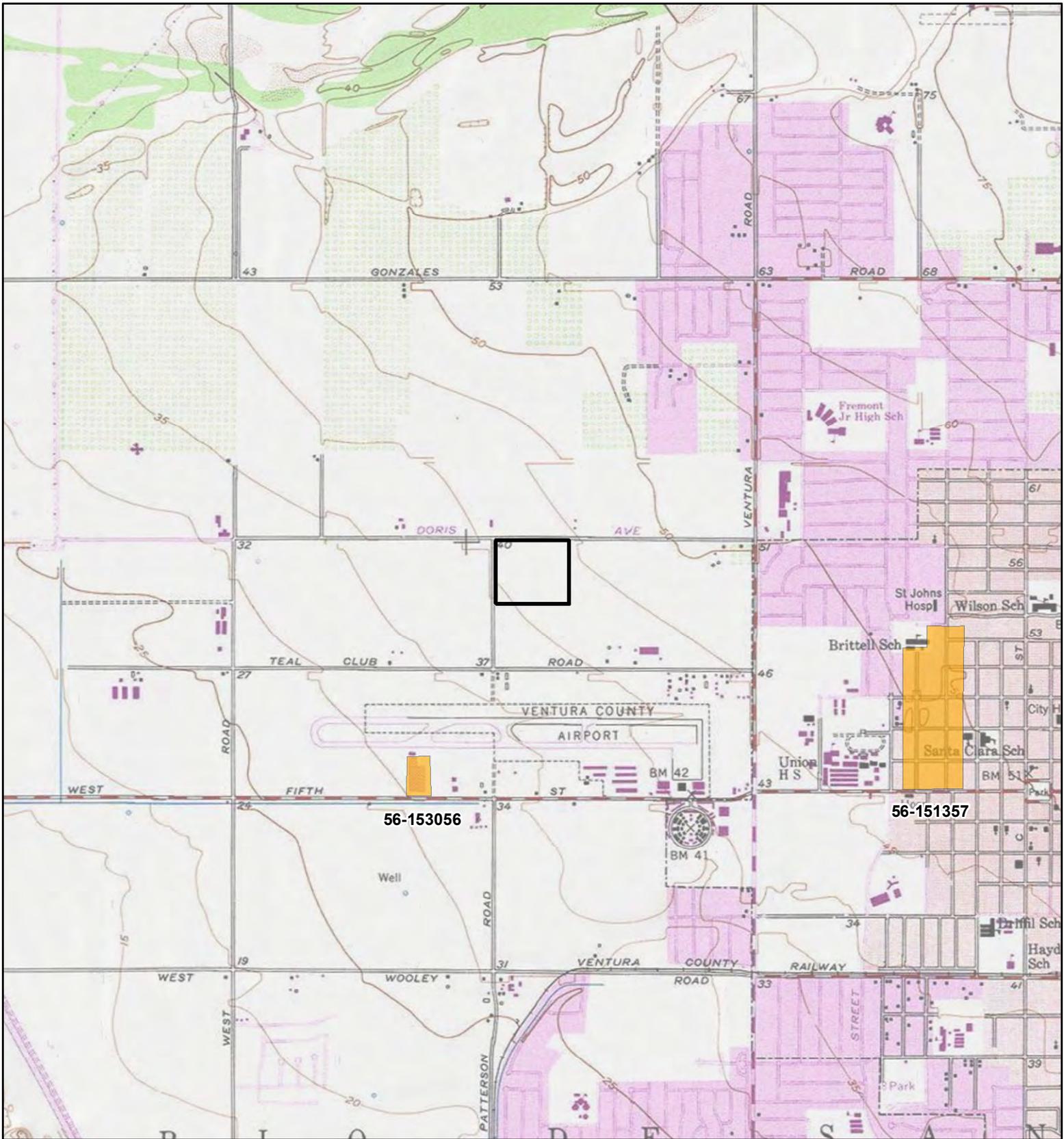
	Project Area		VN-02933		VN-02978		VN2008		VN459
	VN-02796		VN236		VN1005		VN2017		VN470
	VN-03023		VN2434		VN1133		VN2021		VN513
	VN-03054		VN976		VN1136		VN2438		VN815
	VN2404		VN-02627		VN1578		VN2468		VN904
	VN2465		VN-02679		VN1583		VN2473		VN990
			VN-02884		VN1819		VN2478		VN991

N

0 0.5 1 Miles

Previous Surveys

Doris/Patterson Road
Educational Facilities Project
Ventura County, CA



Legend

-  Project Area
-  Previously Identified Resource

N



0 1,000 2,000
Feet

Previously Identified Resources

Doris/Patterson Road
Educational Facilities Project
Ventura County, CA

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-00236		1980	Horne, Stephen	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease Ocs P-0202 and P-0216, Offshore Southern California	Dames & Moore/Stephen Horne	56-000553, 56-000662, 56-000663, 56-000664, 56-000665, 56-000666, 56-000667, 56-001234, 56-120002, 56-120003
VN-00459		1985	Bissell, Ronald M.	A Cultural Resources Assessment of Portions of Camarillo and Oxnard Airports, Ventura County, California	RMW Paleo Associates, Inc.	
VN-00470		1985	Singer, Clay A.	Cultural Resources Survey and Impact Assessment for the Channel Islands Community Hospital Eir		
VN-00513		1986	Mouriquand-Blodgett, Leslie	Archival Search for a 31.8 Acre Parcel on the Northwest Corner of Ventura Road and Doris Avenue, Oxnard, California.	LESLIE MOURIQUAND-BLODGETT,	
VN-00815		1990	Salls, Roy A.	Report of Archaeological Reconnaissance Survey Of: Tentative Tract 4648 Oxnard, California	NCPA	
VN-00904		1990	Bleitz, Dana E.	Report of Archaeological Reconnaissance Survey of Parcel 1, Tentative Parcel Map 90-5 Oxnard, California	Northridge Center for Public Archaeology, CSUN	
VN-00976		1990	Singer, Clay A. and John E. Atwood	Cultural Resources Survey and Impact Assessment for the Proposed Realignment of the Doris Drain in the City of Oxnard, Ventura County, Californiar	C.A. Singer & Associates, Inc.	
VN-00990		1991	Brown, Joan C.	Cultural Resources Reconnaissance of a 20 Acre Parcel in the City of Oxnard, California.	RMW Paleo Associates, Inc.	
VN-00991		1990	Brown, Joan. C.	Cultural Resources Reconnaissance of an 80 Acre Parcel in the City of Oxnard, California.	RMW Paleo Associates, Inc.	
VN-01005		1991	Brown, Joan C.	Cultural Resources Reconnaissance of a 20 Acre Parcel in the City of Oxnard, California (Revised)	RMW Paleo Associates, Inc.	
VN-01133		1992	Brown, Joan C.	Cultural Resources Reconnaissance of a 51.03 Acre Parcel Located in Oxnard, Ventura County, California	RMW Paleo Associates, Inc.	
VN-01136		1992	MacFarlane, Heather	Phase 1 Cultural Resources Survey 9.42 Acres Located at the SE Corner of Teal Club Road and Victoria Avenue (a.p.n. 183-0-090-575) Annexation #87-8 and Zone Change 767 Ventura County, California	MacFarlane Archaeological Consultants	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-01578		1998	McKenna, Jeanette A.	Historic Research and Review of the Mcloughlin/ Maxwell Property, Located in Both Unincorporated Ventura County (250 Acres) and the City of Oxnard (80 Acres), Ventura County, California	McKenna et al.	
VN-01583		1997	Anonymous	Phase 1 Archaeological Survey and Cultural Resources Assessment for the Northwest Golf Course Community Specific Plan Study Area, Oxnard, Ventura County, California	W & S Consultants	
VN-01819		1999	Duke, Curt	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 504-11, County of Ventura, California	LSA Associates, Inc.	
VN-02008		2001	Martinez, Al	Nhpa Section 106 Review, Per Fcc Direction of Sprint Pcs Wireless Communications Facility No. Vr54x442d (Iemon Grove Located at South East Corner of Victoria Avenue and Gonzales Road, Oxnard, California 93030	Michael Brandman Associates	
VN-02017		2001	Billat, Lorna	Nextel Mobile Radio Facilities	Earth Touch	
VN-02021		2001	Higgins, Glen	Negative Archaeological Survey Report: Gold Coast Plaza	Compass Rose Archaeological, Inc.	
VN-02404		2006	Wlodarski, Robert J.	Records Search and Field Reconnaissance Phase for the Proposed Royal Street Communications Wireless Telecommunications Site La0931 (oxnard P.a.l.), Located at 350 South K Street, Oxnard, Ventura County, California 93030	Cellular, Archaeological Resource, Evaluations	
VN-02434		2006	Maki, Mary K.	Archaeological Survey Report of Approximately 44,000 Linear Feet for the Recycled Water Backbone System Project, City of Oxnard, Ventura County, California	Conejo Archaeological Consultants	56-000662, 56-000664, 56-150015, 56-150016, 56-150017, 56-152763, 56-152786, 56-152788, 56-152790, 56-152791, 56-152792, 56-152801, 56-152803, 56-152804, 56-152805, 56-152807, 56-152808, 56-152809, 56-152812, 56-152814
VN-02438		2006	Whitley, David S.	Phase I Archaeological Survey for the Rancho Victoria Study Area, Oxnard, Ventura County, California	W & S Consultants	
VN-02465		2004	McKenna, Jeanette A.	Cultural Resources Monitoring Program at the Mclaughlin House, Oxnard, Ventura County	McKenna et al.	

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
VN-02468		2003	Foster, John M.	Archaeological Investigation for Tentative Tract	Greenwood and Associates	
VN-02473		2004	Wlodarski, Robert J.	Phase I Archaeological Investigation: 2425 West 5th Street, Oxnard, Ca	Compass Rose Archaeological, Inc.	
VN-02478		2003	Simon, Joseph M.	Phase I Archaeological Survey of a 47 Acres Parcel at West Fifth Street and Patterson Road, Oxnard, Vettura County California	W & S Consultants	
VN-02627		1993	King, Chester	Native American Placenames in the Vicinity of the Pacific Pipeline: Part 2: Gaviota to the San Fernando Valley: Draft	Topanga Anthropological Consultants	
VN-02679		2008	Wlodarski, Robert J.	A Phase I Archaeological Study for Store 07449, Located at 481 South Ventura Road City of Oxnard, County of Ventura, California	Historical, Environmental, Archaeological, Research, Team	
VN-02796		2009	Schmidt, June A.	Moorpark-Shelline-Valdez 66kV New Pole Installation/ Old Pole Removal and WO 6039-4800; 9-4857 Deteriorated Pole Replacements, Various Distribution Circuits, Ventura County, California	Compass Rose Archaeological, Inc.	56-000031, 56-000032, 56-000033, 56-000034, 56-000201, 56-000241, 56-152746, 56-152747, 56-152748
VN-02884		2009	Austerman, Virginia	Draft Cultural Resources Survey for the Proposed Oxnard Airport Land/Easement Acquisition Project, City of Oxnard, Ventura County, California	SWCA Environmental Consultants	
VN-02933		2011	Toren, A. George	Phase I Archaeological Investigation for the City of Oxnard Recycled Water Project New Alignment	Compass Rose Archaeological, Inc.	
VN-02978		2004	Sharpe, Jim and Durio, Lori	Groundwater Recovery Enhancement and Treatment (GREAT) Program, Cultural Resources Inventory Report	CH2MHill	56-000506, 56-000662, 56-000664, 56-000665, 56-000666, 56-000726, 56-000789, 56-000918, 56-100060, 56-152779, 56-152780, 56-152781, 56-152782, 56-152783, 56-152784
VN-03023		2011	Martorana, Dean	Verizon Wireless-Teal Club, 3551 West 5th Street	URS	
VN-03054		2012	Loftus, Shannon	Cultural Resource Records Search and Site Survey AT&T Site SBOV62 (36309) Oxnard Airport, 3151 West 5th Street Oxnard, Ventura County, California	ACE Environmental	56-153056

Resource List

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-56-151357		OHP Property Number - 016751; Resource Name - Oxnard, Henry T Historic District; Other - Hentry T Oxnard Subdivision	District	Historic	HP02 (Single family property)	1981 (Judy Triem, Cutltural Heritage Board); 1998 (Moss, Benny & Rosanne, Friends of Old Oxnard)	
P-56-153056		Resource Name - Consulado de Mexico / Durham School Services; Other - SBOV62 (36309); Other - Oxnard Airport	Building, Structure	Historic	HP08 (Industrial building)	2012 (Shannon L. Loftus, ACE Environmental)	VN-03054

PROPERTY-NUMBER	PRIMARY-#	STREET-ADDRESS.....	NAMES.....	CITY.NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
016794	56-151400	E ST	E STREET	OXNARD	P	0	HIST.SURV.	3030-0005-9999		5S2	
016789	56-151395	142 E ST		OXNARD	P	1950	HIST.SURV.	3030-0005-0038		5D2	
017019	56-151625	ETTING RD	OXNARD JAPANESE CEMETERY	OXNARD	P	1900	HIST.SURV.	3030-0018-0000		7R	
016751	56-151357	F ST	HENRY T OXNARD HISTORIC DISTRICT	OXNARD	P	1908	HIST.RES.	NPS-99000109-9999	02/05/99	1S	AC
							NAT.REG.	56-0022	02/05/99	3S	AC
							HIST.SURV.	3030-0004-9999		7N	
016674	56-151280	G ST	WALTER H. LATHROP SUBDIVISION, G S	OXNARD	P	1913	HIST.SURV.	3030-0003-9999		5S2	
016648	56-151254	355 G ST		OXNARD	P	1916	NAT.REG.	56-0022	02/05/99	1D	AC
							HIST.RES.	NPS-99000109-0119	02/05/99	1D	AC
							HIST.SURV.	3030-0003-0040		7N	
166007		1284 HILL ST		OXNARD	P	1950	PROJ.REVW.	HUD070501A	05/04/07	6Y	
169870		160 JAMES AVE		OXNARD	P	1950	PROJ.REVW.	HUD080116F	01/18/08	6Y	
067187	56-152254	266 MYRTLE AVE	SR 101 WIDEN	OXNARD	U		PROJ.REVW.	FHWA900227A	03/27/90	6Y	
067186	56-152253	301 MYRTLE AVE	SR 101 WIDEN	OXNARD	U		REG.UNIT	56-0027	03/10/01	7J	
							PROJ.REVW.	FHWA900227A	03/27/90	6Y	
016839	56-151445	121 N C ST		OXNARD	P	1935	HIST.SURV.	3030-0007-0008		5D2	
016832	56-151438	122 N C ST		OXNARD	P	1941	HIST.SURV.	3030-0007-0001		5D2	
016840	56-151446	123 N C ST		OXNARD	P	1935	HIST.SURV.	3030-0007-0009		5D2	
016820	56-151426	110 N D ST		OXNARD	P	1970	HIST.SURV.	3030-0006-0026		7R	
016795	56-151401	121 N D ST		OXNARD	P	1906	HIST.SURV.	3030-0006-0001		5D2	
016796	56-151402	127 N D ST		OXNARD	P	1925	HIST.SURV.	3030-0006-0002		5D2	
016821	56-151427	130 N D ST		OXNARD	P	1925	HIST.SURV.	3030-0006-0027		5D2	
016775	56-151381	117 N E ST		OXNARD	P	1925	HIST.SURV.	3030-0005-0024		5D2	
016778	56-151384	120 N E ST		OXNARD	P	1940	HIST.SURV.	3030-0005-0027		5D2	
016776	56-151382	123 N E ST		OXNARD	P	1925	HIST.SURV.	3030-0005-0025		5D2	
016777	56-151383	130 N E ST		OXNARD	P	1925	HIST.SURV.	3030-0005-0026		5D2	
016779	56-151385	131 N E ST		OXNARD	P	1925	HIST.SURV.	3030-0005-0028		5D2	
016742	56-151348	102 N F ST		OXNARD	P	1912	HIST.RES.	NPS-99000109-0009	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	3D	AC
							HIST.SURV.	3030-0004-0068		7N	
016675	56-151281	103 N F ST		OXNARD	P	1912	HIST.RES.	NPS-99000109-0001	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	1D	AC
							HIST.SURV.	3030-0004-0001		7N	
016743	56-151349	112 N F ST		OXNARD	P	1910	HIST.RES.	NPS-99000109-0008	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	3D	AC
							HIST.SURV.	3030-0004-0069		7N	
016676	56-151282	113 N F ST		OXNARD	P	1912	HIST.RES.	NPS-99000109-0002	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	1D	AC
							HIST.SURV.	3030-0004-0002		7N	
016744	56-151350	118 N F ST		OXNARD	P	1930	HIST.RES.	NPS-99000109-0007	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	3D	AC
							HIST.SURV.	3030-0004-0070		7N	
016677	56-151283	125 N F ST		OXNARD	P	1912	HIST.RES.	NPS-99000109-0003	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	1D	AC
							HIST.SURV.	3030-0004-0003		7N	
016745	56-151351	128 N F ST		OXNARD	P	1912	HIST.RES.	NPS-99000109-0006	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	3D	AC
							HIST.SURV.	3030-0004-0071		7N	
016678	56-151284	135 N F ST		OXNARD	P	1914	HIST.RES.	NPS-99000109-0010	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	1D	AC
							HIST.SURV.	3030-0004-0004		7N	
016746	56-151352	138 N F ST		OXNARD	P	1915	HIST.RES.	NPS-99000109-0005	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	3D	AC
							HIST.SURV.	3030-0004-0072		7N	
016679	56-151285	145 N F ST		OXNARD	P	1915	HIST.RES.	NPS-99000109-0011	02/05/99	1D	AC
							NAT.REG.	56-0022	02/05/99	1D	AC

OFFICE OF HISTORIC PRESERVATION * * * Directory of Properties in the Historic Property Data File for VENTURA County.										Page 35	04-05-12				
PROPERTY-NUMBER	PRIMARY-#	STREET-ADDRESS.....	NAMES.....	CITY-NAME.....	OWN	YR-C	OHP-PROG..	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT				
017029	56-151635	248 S ROOSEVELT AVE		OXNARD	P	1920	HIST.SURV.	3030-0028-0000			7R				
017027	56-151633	249 S ROOSEVELT AVE	BETHEL AFRICAN METHODIST EPISCOPAL	OXNARD	P	1948	HIST.SURV.	3030-0026-0000			7R				
017039	56-151645	260 S WILSON AVE		OXNARD	P	1962	HIST.SURV.	3030-0038-0000			7R				
017040	56-151646	261 S WILSON AVE		OXNARD	P	1962	HIST.SURV.	3030-0039-0000			7R				
163511		2135 SAN MARINO ST		OXNARD	P	1950	PROJ.REVW.	HUD061010E	10/10/06		6Y				
128211		3025 SANTA CLARA AVE		OXNARD	P	1948	HIST.RES.	DOE-56-01-0006-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128210		3190 SANTA CLARA AVE		OXNARD	P	1948	HIST.RES.	DOE-56-01-0005-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128206		3222 SANTA CLARA AVE		OXNARD	P	1939	HIST.RES.	DOE-56-01-0004-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128205		3242 SANTA CLARA AVE		OXNARD	P	1938	HIST.RES.	DOE-56-01-0003-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128204		3302 SANTA CLARA AVE		OXNARD	P	1920	HIST.RES.	DOE-56-01-0002-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128203		3320 SANTA CLARA AVE		OXNARD	P	1920	HIST.RES.	DOE-56-01-0001-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
171765		478 TEAKWOOD ST		OXNARD		1956	PROJ.REVW.	HUD080604C	06/13/08		6Y				
181836		1420 VALLEY PARK DR		OXNARD	P	1949	PROJ.REVW.	HUD110222F	02/25/11		6Y				
128212		2371 VENTURA BLVD		OXNARD		1932	HIST.RES.	DOE-56-01-0007-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128215		2631 VENTURA BLVD		OXNARD	P	1938	HIST.RES.	DOE-56-01-0010-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128216		2651 VENTURA BLVD		OXNARD	P	1938	HIST.RES.	DOE-56-01-0011-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
128213		2661 VENTURA BLVD		OXNARD	P	1945	HIST.RES.	DOE-56-01-0008-0000	05/03/01		6Y				
							PROJ.REVW.	FHWA010404C	05/03/01		6Y				
016992	56-151598	W 1ST ST	WEST FIRST STREET	OXNARD	P	1905	HIST.SURV.	3030-0010-9999			5S2				
016964	56-151570	209 W 1ST ST		OXNARD	P	1921	HIST.SURV.	3030-0010-0006			5D2				
016965	56-151571	213 W 1ST ST		OXNARD	P	1921	HIST.SURV.	3030-0010-0007			5D2				
016971	56-151577	216 W 1ST ST		OXNARD	P	1920	HIST.SURV.	3030-0010-0013			5D2				
016966	56-151572	219 W 1ST ST		OXNARD	P	1921	HIST.SURV.	3030-0010-0008			5D2				
016967	56-151573	223 W 1ST ST		OXNARD	P	1921	HIST.SURV.	3030-0010-0009			5D2				
016968	56-151574	227 W 1ST ST		OXNARD	P	1935	HIST.SURV.	3030-0010-0010			5D2				
016969	56-151575	235 W 1ST ST		OXNARD	P	1922	HIST.SURV.	3030-0010-0011			5D2				
016970	56-151576	245 W 1ST ST		OXNARD	P	1905	HIST.SURV.	3030-0010-0012			5D2				
016972	56-151578	252 W 1ST ST		OXNARD	P	1960	HIST.SURV.	3030-0010-0014			7R				
016973	56-151579	303 W 1ST ST		OXNARD	P	1923	HIST.SURV.	3030-0010-0015			5D2				
016974	56-151580	307 W 1ST ST		OXNARD	P	1923	HIST.SURV.	3030-0010-0016			5D2				
016975	56-151581	311 W 1ST ST		OXNARD	P	1923	HIST.SURV.	3030-0010-0017			5D2				
016976	56-151582	321 W 1ST ST		OXNARD	P	1965	HIST.SURV.	3030-0010-0018			7R				
016977	56-151583	327 W 1ST ST		OXNARD	P	1929	HIST.SURV.	3030-0010-0019			5D2				
016979	56-151585	328 W 1ST ST		OXNARD	P	1920	HIST.SURV.	3030-0010-0021			5D2				
016980	56-151586	336 W 1ST ST		OXNARD	P	1926	HIST.SURV.	3030-0010-0022			5D2				
016978	56-151584	339 W 1ST ST		OXNARD	P	1912	HIST.SURV.	3030-0010-0020			5D2				
016959	56-151565	345 W 1ST ST		OXNARD	P	1908	HIST.SURV.	3030-0010-0001			5D2				
016981	56-151587	401 W 1ST ST		OXNARD	P	1925	HIST.SURV.	3030-0010-0023			5D2				
016960	56-151566	411 W 1ST ST		OXNARD	P	1907	HIST.SURV.	3030-0010-0002			5D2				
016985	56-151591	418 W 1ST ST		OXNARD	P	1911	HIST.SURV.	3030-0010-0027			5D2				
016982	56-151588	421 W 1ST ST		OXNARD	P	1965	HIST.SURV.	3030-0010-0024			7R				
016983	56-151589	425 W 1ST ST		OXNARD	P	1922	HIST.SURV.	3030-0010-0025			5D2				
016984	56-151590	435 W 1ST ST		OXNARD	P	1909	HIST.SURV.	3030-0010-0026			5D2				
016961	56-151567	501 W 1ST ST		OXNARD	P	1934	HIST.SURV.	3030-0010-0003			5D2				
016986	56-151592	509 W 1ST ST		OXNARD	P	1928	HIST.SURV.	3030-0010-0028			5D2				
016987	56-151593	521 W 1ST ST		OXNARD	P	1937	HIST.SURV.	3030-0010-0029			5D2				
016988	56-151594	529 W 1ST ST		OXNARD	P	1938	HIST.SURV.	3030-0010-0030			5D2				

PROPERTY-NUMBER	PRIMARY-#	STREET-ADDRESS	NAMES	CITY-NAME	OWN	YR-C	OHP-PROG	PRG-REFERENCE-NUMBER	STAT-DAT	NRS	CRIT
016989	56-151595	537 W 1ST ST		OXNARD	P	1938	HIST.SURV.	3030-0010-0031		5D2	
016962	56-151568	603 W 1ST ST		OXNARD	P	1912	HIST.SURV.	3030-0010-0004		5D2	
016963	56-151569	611 W 1ST ST		OXNARD	P	1922	HIST.SURV.	3030-0010-0005		5D2	
016990	56-151596	618 W 1ST ST		OXNARD	P	1919	HIST.SURV.	3030-0010-0032		5D2	
016991	56-151597	619 W 1ST ST		OXNARD	P	1920	HIST.SURV.	3030-0010-0033		5D2	
016819	56-151425	529 W 4TH ST		OXNARD	P	1928	HIST.SURV.	3030-0006-0025		5D2	
017012	56-151618	W 5TH ST	WEST FIFTH STREET	OXNARD	P	1904	HIST.SURV.	3030-0011-9999		5S2	
016993	56-151599	426 W 5TH ST		OXNARD	P	1928	HIST.SURV.	3030-0011-0001		5D2	
017006	56-151612	500 W 5TH ST		OXNARD	P	1965	HIST.SURV.	3030-0011-0014		7R	
017007	56-151613	520 W 5TH ST		OXNARD	P	1970	HIST.SURV.	3030-0011-0015		7R	
017004	56-151610	521 W 5TH ST		OXNARD	P	1920	HIST.SURV.	3030-0011-0012		5D2	
016998	56-151604	527 W 5TH ST		OXNARD	P	1904	HIST.SURV.	3030-0011-0006		5D2	
016994	56-151600	534 W 5TH ST		OXNARD	P	1903	HIST.SURV.	3030-0011-0002		5D2	
016999	56-151605	535 W 5TH ST		OXNARD	P	1911	HIST.SURV.	3030-0011-0007		5D2	
016995	56-151601	542 W 5TH ST		OXNARD	P	1911	HIST.SURV.	3030-0011-0003		5D2	
017005	56-151611	545 W 5TH ST		OXNARD	P	1911	HIST.SURV.	3030-0011-0013		5D2	
016996	56-151602	600 W 5TH ST		OXNARD	P	1912	HIST.SURV.	3030-0011-0004		5D2	
017008	56-151614	603 W 5TH ST		OXNARD	P	1905	HIST.SURV.	3030-0011-0016		5D2	
017000	56-151606	611 W 5TH ST		OXNARD	P	1926	HIST.SURV.	3030-0011-0008		5D2	
017009	56-151615	618 W 5TH ST		OXNARD	P	1915	HIST.SURV.	3030-0011-0017		5D2	
017010	56-151616	626 W 5TH ST		OXNARD	P	1930	HIST.SURV.	3030-0011-0018		5D2	
016997	56-151603	636 W 5TH ST		OXNARD	P	1925	HIST.SURV.	3030-0011-0005		5D2	
017001	56-151607	640 W 5TH ST		OXNARD	P	1931	HIST.SURV.	3030-0011-0009		5D2	
017011	56-151617	720 W 5TH ST		OXNARD	P	1965	HIST.SURV.	3030-0011-0019		7R	
017002	56-151608	726 W 5TH ST		OXNARD	P	1929	HIST.SURV.	3030-0011-0010		5D2	
017003	56-151609	734 W 5TH ST		OXNARD	P	1931	HIST.SURV.	3030-0011-0011		5D2	
103299	56-152501	838 W 5TH ST		OXNARD			PROJ.REVW.	HUD941116A	08/29/96	6Y	
097257	56-152407	838 W 5TH ST		OXNARD	U	1926	PROJ.REVW.	HUD950622I	08/29/95	6Y	
097258	56-152408	840 W 5TH ST		OXNARD	U	1926	PROJ.REVW.	HUD950622H	08/29/95	6Y	
103298	56-152500	840 W 5TH ST		OXNARD			PROJ.REVW.	HUD941116A	08/29/96	6Y	
017018	56-151624	737 W 6TH ST	JOHN G. HILL HOUSE	OXNARD	P	1885	HIST.SURV.	3030-0017-0000		5S2	
163592		1150 W FIR ST		OXNARD	P	1955	PROJ.REVW.	HUD061030D	10/30/06	6Y	
163512		1315 W FIR ST		OXNARD	P	1955	PROJ.REVW.	HUD061010F	10/10/06	6Y	
116627		3779 W GONZALES RD	COOK'S CABIN	OXNARD	P	1910	HIST.RES.	DOE-56-98-0012-0003	07/27/98	2D2	
							PROJ.REVW.	HUD980702B	07/27/98	2D2	
116624		3779 W GONZALES RD	MAIN RESIDENCE	OXNARD	P	1910	HIST.RES.	DOE-56-98-0012-0002	07/27/98	2D2	
							PROJ.REVW.	HUD980702B	07/27/98	2D2	
116620		3779 W GONZALES RD	RANCH HOUSE	OXNARD	P	1870	HIST.RES.	DOE-56-98-0012-0001	07/27/98	2D2	
							PROJ.REVW.	HUD980702B	07/27/98	2D2	
116618		3779 W GONZALES RD	LEONARD RANCH HISTORIC DISTRICT	OXNARD			HIST.RES.	DOE-56-98-0012-9999	07/27/98	2S2	ABC
							PROJ.REVW.	HUD980702B	07/27/98	2S2	ABC
123542		5011 W GONZALES RD	McGRATH RANCH	OXNARD	P	1890	NAT.REG.	56-0023			
171329		1324 W HEMLOCK ST		OXNARD	P	1955	PROJ.REVW.	HUD080516C	05/19/08	6Y	
016958	56-151564	W MAGNOLIA ST		OXNARD	P	1912	HIST.SURV.	3030-0009-9999		5S2	
016917	56-151523	210 W MAGNOLIA ST		OXNARD	P	1915	HIST.SURV.	3030-0009-0012		5D2	
016918	56-151524	220 W MAGNOLIA ST		OXNARD	P	1920	HIST.SURV.	3030-0009-0013		5D2	
016919	56-151525	226 W MAGNOLIA ST		OXNARD	P	1921	HIST.SURV.	3030-0009-0014		5D2	
016922	56-151528	231 W MAGNOLIA ST		OXNARD	P	1928	HIST.SURV.	3030-0009-0017		5D2	
016920	56-151526	236 W MAGNOLIA ST		OXNARD	P	1916	HIST.SURV.	3030-0009-0015		5D2	
016923	56-151529	237 W MAGNOLIA ST		OXNARD	P	1930	HIST.SURV.	3030-0009-0018		5D2	
016921	56-151527	244 W MAGNOLIA ST		OXNARD	P	1921	HIST.SURV.	3030-0009-0016		5D2	
016924	56-151530	247 W MAGNOLIA ST		OXNARD	P	1929	HIST.SURV.	3030-0009-0019		5D2	
016925	56-151531	255 W MAGNOLIA ST		OXNARD	P	1926	HIST.SURV.	3030-0009-0020		5D2	
016926	56-151532	302 W MAGNOLIA ST		OXNARD	P	1916	HIST.SURV.	3030-0009-0021		5D2	
016930	56-151536	305 W MAGNOLIA ST		OXNARD	P	1922	HIST.SURV.	3030-0009-0025		5D2	

From: [Farrell, Jenna](#)
To: ["nahc@nahc.ca.gov"](mailto:nahc@nahc.ca.gov)
Subject: Sacred Lands File Search Request
Date: Friday, July 28, 2017 9:13:00 AM
Attachments: [Doris Patterson SD nahc-slf contactform 14.pdf](#)
[Location Map.pdf](#)

Please see attached for a request for a Sacred Lands File Search for the Doris Patterson Oxnard School Project.

Thank you,

Jenna

Jenna Farrell | Archaeologist

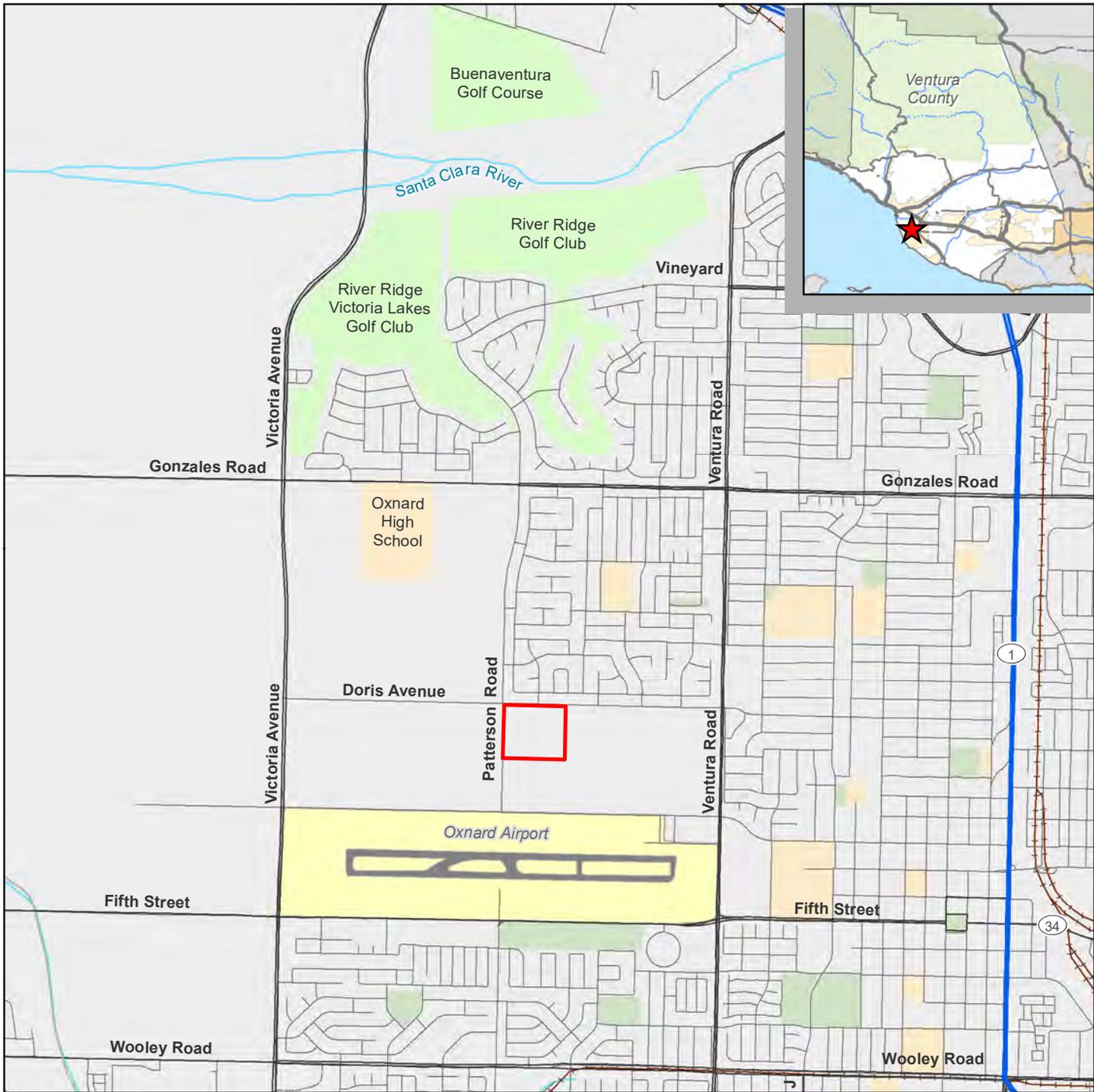
Direct: 916.853.4575 | Main: 916.852.8300 | Fax: 916.852.0307 | Cell: 916.206.8705

Jenna.Farrell@tetrattech.com

Tetra Tech, Inc. | Sciences

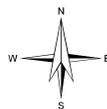
2969 Prospect Park Drive, Suite 100 | Rancho Cordova, CA 95670 | www.tetrattech.com

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Legend

 Project Boundary



Background Map sources: ESRI, Ventura County GIS, Tetra Tech

Oxnard School District

Project Location and Vicinity Map

Doris Patterson
Educational Facilities Project



5383 Hollister Avenue
Suite 130
Santa Barbara, CA 93111

TC NO.	DATE	DRAWN BY	MAP NO.	FIGURE
34007.05	4/27/2017	REYNOLDS	9885	1-1

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



August 23, 2017

Jenna Farrell
Tetrattech

Email to: jenna.farrell@tetrattech.com

RE: Doris Avenue Patterson Road Education Facilities, Ventura County

Dear Ms. Farrel,

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not preclude the presence of cultural resources in any project area. Other sources for cultural resources should also be contacted for information regarding known and/or recorded sites.

Enclosed is a list of Native Americans tribes who may have knowledge of cultural resources in the project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these tribes, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at frank.lienert@nahc.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to be "Frank Lienert", written over a horizontal line.

Frank Lienert
Associate Governmental Program Analyst

**Native American Heritage Commission
Native American Contacts
8/23/2017**

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kkahn@santaynezchumash.org
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Barbareno/Ventureno Band of Mission Indians
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Ventura , CA 93005
(805) 701-3246

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessments for the proposed Doris Avenue Patterson Road Education Facilities, Ventura County



OXNARD SCHOOL DISTRICT

1051 South "A" Street ♦ Oxnard, California 93030 ♦ 805/385-1501 ♦ www.oxnardsd.org

May 2, 2017

BOARD OF TRUSTEES

ERNIE "MO" MORRISON
President

DEBRA M. CORDES
Clerk

DENIS O'LEARY
MONICA MADRIGAL LOPEZ
VERONICA ROBLES-SOLIS

Mr. Anthony Morales, Chief
San Gabriel Band of Mission Indians
P.O. Box 693
San Gabriel, CA 91778
(626) 483-3564
GTTribalCouncil@aol.com

Subject: Formal Project Notification and Request for Tribal Consultation Pursuant to the California Environmental Quality Act, Public Resource Code § 210803.1 (d), and Assembly Bill No. 52 (as amended) for the Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

ADMINISTRATION

DR. CESAR MORALES
Superintendent

LISA CLINE
Deputy Superintendent
Business and Fiscal Services

DR. JESUS VACA
Assistant Superintendent
Human Resources and
Support Services

ROBIN I. FREEMAN
Assistant Superintendent
Educational Services

Dear Mr. Morales,

Pursuant to the provisions of Assembly Bill No. 52, as amended, as the lead agency under the California Environmental Quality Act (CEQA), the Oxnard School District (District) hereby extends an invitation to initiate consultation on the CEQA review of the Doris Avenue/Patterson Road Educational Facilities Project (Project) in order to contribute your knowledge to the environmental review process and to help identify and address potential Project adverse impacts to tribal cultural resources (as defined by Public Resource Code § 21074 (a)). The District is proposing to conduct the Doris Avenue/Patterson Road Educational Facilities Project in the geographic area traditionally and culturally affiliated with the San Gabriel Band of Mission Indians. The Project location and description are provided below.

Project Location

The Project site is located near the corner of Doris Avenue and Patterson Road, on a portion of APN: 183-0-070-090, in the City of Oxnard, unincorporated Ventura County, California, as illustrated on the attached Project Location and Vicinity Map. The Project is also within the Ventura County Save Open-Space and Agricultural Resources boundary, and within the City of Oxnard's Sphere of Influence and City Urban Restriction Boundary. The Project area is relatively flat and currently used for agriculture (row crops). The project site consists of approximately 25 acres. It is surrounded by adjacent agricultural uses to the south (further south is the Oxnard Airport), east and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

Project Description

OSD proposes to construct and operate a new elementary, middle school and district

Mission: "Ensure a culturally diverse education for each student in a safe, healthy and supportive environment that prepares students for college and career opportunities."

administrative center. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The project will include a proposed reorganization which will be comprised of an annexation into the City of Oxnard and the Calleguas Municipal Water District and a detachment from the Ventura County Fire Protection District, the Ventura County Resource Conservation District, and Ventura County Service Areas 32 and 33. The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. In total, the proposed project would comprise approximately 148,782 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. The project site will have a drought tolerant landscape that meets the 2009 Model Water Efficiency Landscape Ordinance (MWELo) regulations adopted by the Department of Water Resources (DWR).

The proposed project includes utility connections including water, sewer, gas, electric, data/telecommunications, and storm water collection. Water, wastewater, and recycled water need to be extended to the site. Power is located on the east side of Patterson Road. The nearby residential neighborhood to the north of the site has phone and cable/communication facilities that would need to be extended to the site.

Phased construction is anticipated to begin in 2019 and each school would take approximately 15 to 16 months to construct. Operation of the new K-5 elementary school is anticipated for the 2020-2021 school year followed by the 6-8 middle school for the 2022-2023 school year.

If you would like to initiate consultation with the District regarding the Doris Avenue/Patterson Road Educational Facilities Project, please provide a written reply within 30 days (pursuant to PRC § 21080.3.1(b)) to the District address below. Should the District not receive a response within the thirty (30) days, it will be presumed that you have declined consultation. We recognize the valuable contribution of the consultation process and look forward to your reply. Please do not hesitate to contact me with any additional questions or comments at:

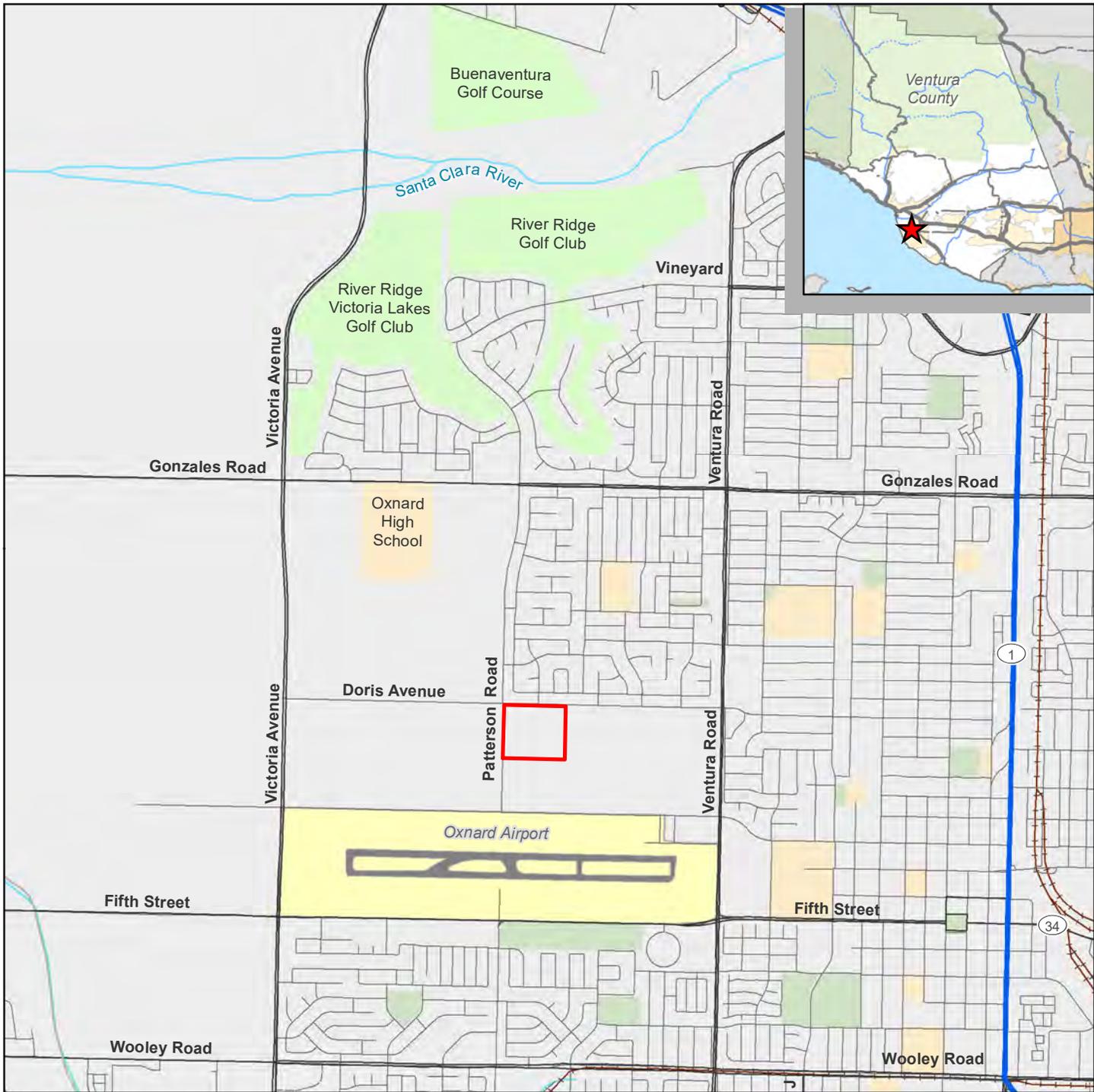
Lisa Cline
Oxnard School District
1051 South A Street
Oxnard, CA 93030
(805) 385-1501
lcline@oxnardsd.org

Sincerely,



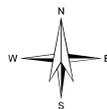
LISA CLINE
Deputy Superintendent
Business & Fiscal Services

LC/lg
Attachment A: Maps



Legend

 Project Boundary



Background Map sources: ESRI, Ventura County GIS, Tetra Tech

Oxnard School District

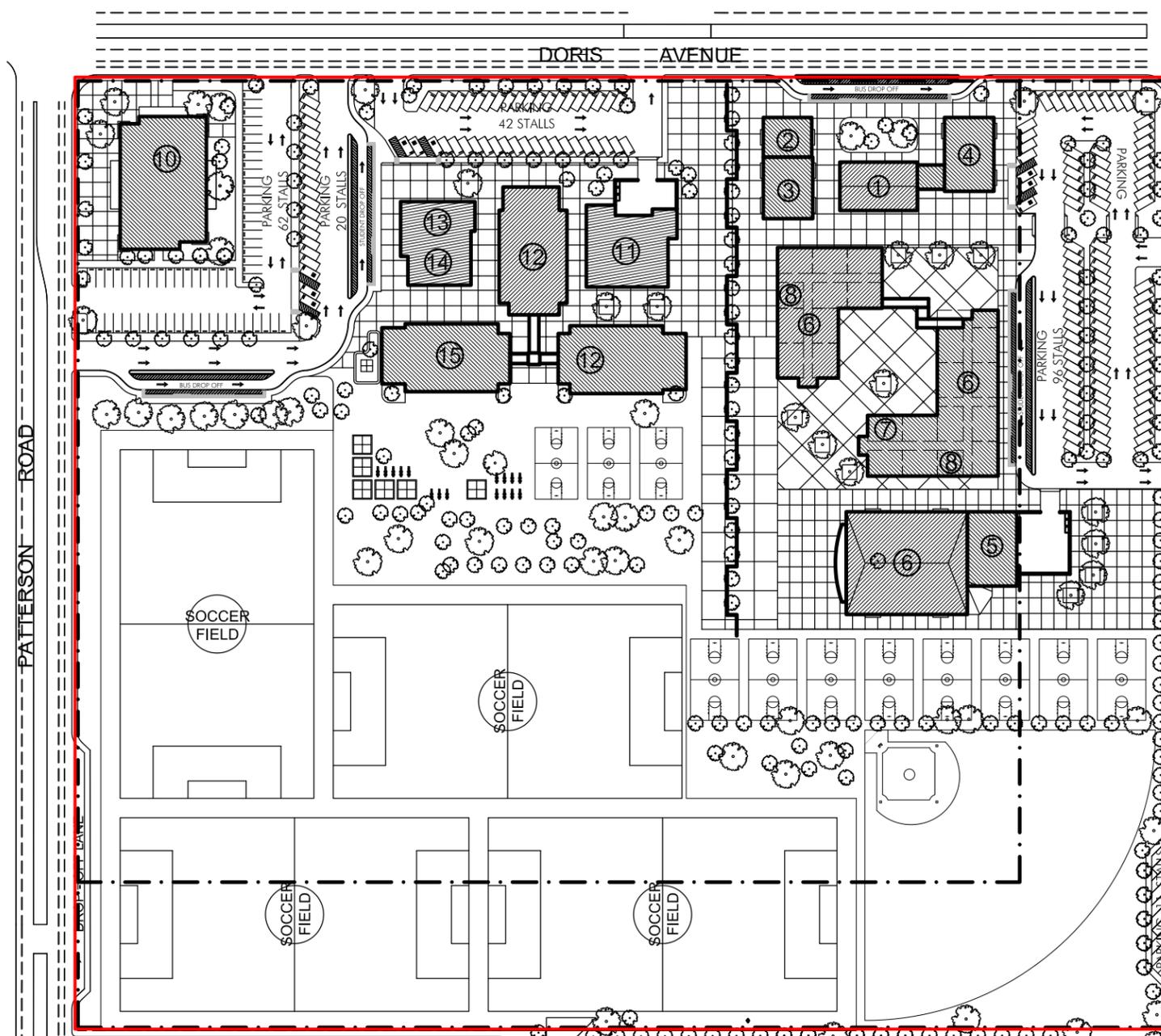
Project Location and Vicinity Map

Doris Patterson
Educational Facilities Project



5383 Hollister Avenue
Suite 130
Santa Barbara, CA 93111

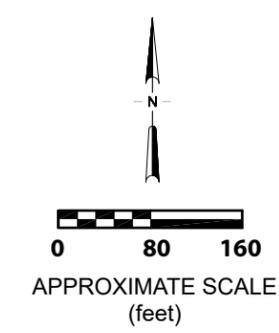
TC NO.	DATE	DRAWN BY	MAP NO.	FIGURE
34007.05	4/27/2017	REYNOLDS	9885	1-1



LEGEND

SCHOOL SITE BOUNDARY

1. ADMIN. BLDG.	3,005 S.F.
2. MEDIA CENTER	2,000 S.F.
3. VISUAL ARTS & MUSIC	3,200 S.F.
4. STUDENT SUP. PARENT/ CONFERENCE CENTER	3,800 S.F.
5. FOOD SERVICES	3,900 S.F.
6. 2 STORY / 41 C.R. BLDG	45,312 S.F.
7. SCIENCE BLDG	2,600 S.F.
8. RESTROOMS - TOTAL AREA:	3,000 S.F.
9. GYMNASIUM	13,150 S.F.
10. 2 STORY DISTRICT OFFICE	23,665 S.F.
11. MULTI-PURPOSE & FOOD SERV. BLDG	5,375 S.F. 3,600 S.F.
12. 2 STORY / 23 C.R. BLDG	22,560 S.F.
13. ADMIN.	3,005 S.F.
14. MEDIA CENTER & STUDENT SUPPORT SERV.	2,700 S.F. 1,510 S.F.
15. KINDERGARTEN	6,400 S.F.



Oxnard School District

Conceptual Site Map

Doris Patterson
Educational Facilities Project

TETRA TECH, INC.
 Tetra Tech, Inc.
 5383 Hollister Ave., Suite 130
 Santa Barbara, CA 93111

TC NO.	DATE	DRAWN BY		FIGURE
36007.05	04/27/17	DODSON		1-2

Map source: Conceptual Doris/Patterson Site Preliminary Study, Job No. 2749 (Flewelling & Moody).



September 22, 2017

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687
Ventura, CA 93005
(805) 701-3246

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Eleanor Arrellanes,

Tetra Tech, Inc. is assisting the Oxnard School District (OSD or District) with a draft Environmental Impact Report (EIR) for the proposed Doris Avenue/Patterson Road Educational Facilities Project. The Native American Heritage Commission (NAHC) was contacted by email on January 13, 2016 to request a sacred lands file search. The NAHC responded on August 23, 2017 that no Native American cultural resources were identified by their search within the immediate Project area. The NAHC provided a list of Native American individuals and organizations that may have knowledge of tribal cultural resources or cultural resources in the Project area. Your name was included on the NAHC list and we are contacting you as part of our outreach efforts and data gathering to identify any known tribal cultural resources within the Project study area, or if you have any other questions or interest in the Project.

Project Location

The Project site is located at the corner of Doris Avenue and Patterson Road, on a portion of APN: 183-0-070-090, in unincorporated Ventura County, California. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). Please refer to the attached Project Location and Vicinity Map. The Project area is relatively flat and currently used for agriculture (row crops). The project site consists of approximately 25 acres. It is surrounded by adjacent agricultural uses to the south (further south is the Oxnard Airport), east and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

Project Description

The OSD proposes to construct and operate a new elementary, middle school and District administrative center. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon

approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

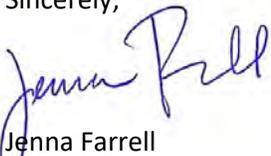
The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. In total, the proposed project would comprise approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings.

The Project is subject to the requirements of the California Environmental Quality Act (CEQA), and OSD is the lead agency for CEQA. As part of the EIR, a cultural resources record and literature search was conducted on August 17, 2017, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at the California State University, Fullerton, California (IC File Number 17953.4033). The records search revealed that a total of 33 previous cultural resources investigation has been conducted within the Project study area (the Project Area of Potential Effect or APE and a 1-mile radius), and one linear previous investigation and no archaeological sites or historic resources are recorded within the Project's APE. An archeological survey of the APE has not been conducted at this time.

We understand that under AB 52, the lead State/public agency is responsible for formal government-to-government consultation with Native American tribes for this Project. This letter does not take the place of nor is it intended to serve as official government-to-government consultation.

I hope this information on the proposed Project has been helpful. Please contact me as soon as possible if you require any additional details regarding the Project and/or if you have any information about known tribal cultural resources within the Project study area that we should be aware of. Please reference "Doris-Patterson Educational Facilities Project" in your correspondence, and send any comments or questions to my attention at Tetra Tech, Inc., 2969 Prospect Park Dr. #100, Rancho Cordova, CA 95670, or call 916-853-4575, or email me at jenna.farrell@tetratech.com.

Sincerely,



Jenna Farrell
Cultural Resources, Tetra Tech

Cc: NAHC Native American Contact List

Attachment A: Maps



September 22, 2017

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos, Jr.
331 Mira Flores Court
Camarillo, CA 93012
(805) 427-0015

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Raudel Joe Banuelos, Jr.,

Tetra Tech, Inc. is assisting the Oxnard School District (OSD or District) with a draft Environmental Impact Report (EIR) for the proposed Doris Avenue/Patterson Road Educational Facilities Project. The Native American Heritage Commission (NAHC) was contacted by email on January 13, 2016 to request a sacred lands file search. The NAHC responded on August 23, 2017 that no Native American cultural resources were identified by their search within the immediate Project area. The NAHC provided a list of Native American individuals and organizations that may have knowledge of tribal cultural resources or cultural resources in the Project area. Your name was included on the NAHC list and we are contacting you as part of our outreach efforts and data gathering to identify any known tribal cultural resources within the Project study area, or if you have any other questions or interest in the Project.

Project Location

The Project site is located at the corner of Doris Avenue and Patterson Road, on a portion of APN: 183-0-070-090, in unincorporated Ventura County, California. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). Please refer to the attached Project Location and Vicinity Map. The Project area is relatively flat and currently used for agriculture (row crops). The project site consists of approximately 25 acres. It is surrounded by adjacent agricultural uses to the south (further south is the Oxnard Airport), east and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

Project Description

The OSD proposes to construct and operate a new elementary, middle school and District administrative center. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final

action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

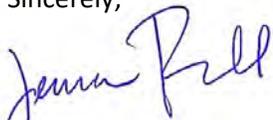
The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. In total, the proposed project would comprise approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings.

The Project is subject to the requirements of the California Environmental Quality Act (CEQA), and OSD is the lead agency for CEQA. As part of the EIR, a cultural resources record and literature search was conducted on August 17, 2017, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at the California State University, Fullerton, California (IC File Number 17953.4033). The records search revealed that a total of 33 previous cultural resources investigation has been conducted within the Project study area (the Project Area of Potential Effect or APE and a 1-mile radius), and one linear previous investigation and no archaeological sites or historic resources are recorded within the Project's APE. An archeological survey of the APE has not been conducted at this time.

We understand that under AB 52, the lead State/public agency is responsible for formal government-to-government consultation with Native American tribes for this Project. This letter does not take the place of nor is it intended to serve as official government-to-government consultation.

I hope this information on the proposed Project has been helpful. Please contact me as soon as possible if you require any additional details regarding the Project and/or if you have any information about known tribal cultural resources within the Project study area that we should be aware of. Please reference "Doris-Patterson Educational Facilities Project" in your correspondence, and send any comments or questions to my attention at Tetra Tech, Inc., 2969 Prospect Park Dr. #100, Rancho Cordova, CA 95670, or call 916-853-4575, or email me at jenna.farrell@tetratech.com.

Sincerely,



Jenna Farrell
Cultural Resources, Tetra Tech

Cc: NAHC Native American Contact List

Attachment A: Maps



September 22, 2017

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stenslie, Chair
365 North Poli Ave
Ojai, CA 93023
805-646-6214

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Julie Lynn Tumamait-Stenslie,

Tetra Tech, Inc. is assisting the Oxnard School District (OSD or District) with a draft Environmental Impact Report (EIR) for the proposed Doris Avenue/Patterson Road Educational Facilities Project. The Native American Heritage Commission (NAHC) was contacted by email on January 13, 2016 to request a sacred lands file search. The NAHC responded on August 23, 2017 that no Native American cultural resources were identified by their search within the immediate Project area. The NAHC provided a list of Native American individuals and organizations that may have knowledge of tribal cultural resources or cultural resources in the Project area. Your name was included on the NAHC list and we are contacting you as part of our outreach efforts and data gathering to identify any known tribal cultural resources within the Project study area, or if you have any other questions or interest in the Project.

Project Location

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Project Description

The OSD proposes to construct and operate a new elementary, middle school and District administrative center. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon

approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

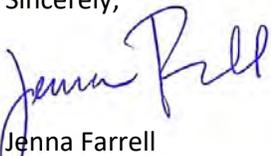
The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. In total, the proposed project would comprise approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings.

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I hope this information on the proposed Project has been helpful. Please contact me as soon as possible if you require any additional details regarding the Project and/or if you have any information about known tribal cultural resources within the Project study area that we should be aware of. Please reference "Doris-Patterson Educational Facilities Project" in your correspondence, and send any comments or questions to my attention at Tetra Tech, Inc., 2969 Prospect Park Dr. #100, Rancho Cordova, CA 95670, or call 916-853-4575, or email me at jenna.farrell@tetratech.com.

Sincerely,



Jenna Farrell
Cultural Resources, Tetra Tech

Cc: NAHC Native American Contact List

Attachment A: Maps



September 22, 2017

Barbareno/Ventureno Band of Mission Indians
Patrick Tumamait
992 El Camino Corto
Ojai, CA 93023
(805) 216-1253

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Patrick Tumamait,

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Tetra Tech, Inc.

2969 Prospect Park Drive, Suite 100, Rancho Cordova, CA 95670
Tel 916.852.8300 Fax 916.852.0307 www.tetrattech.com

approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

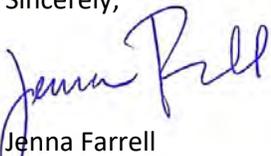
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Sincerely,



Jenna Farrell
Cultural Resources, Tetra Tech

Cc: NAHC Native American Contact List

Attachment A: Maps

Westhaus, Randy

From: Longman, Renee
Sent: Friday, September 22, 2017 11:01 AM
To: 'Kkahn@santaynezchumash.org'
Cc: Farrell, Jenna
Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.
Attachments: Attachment_Maps.pdf

Tracking:	Recipient	Delivery
	'Kkahn@santaynezchumash.org'	
	Farrell, Jenna	Delivered: 9/22/2017 11:01 AM

September 22, 2017

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA 93460
(805) 688-7997
Kkahn@santaynezchumash.org
(805) 693-1768 Fax

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Kenneth Kahn:

Tetra Tech, Inc. is assisting the Oxnard School District (OSD or District) with a draft Environmental Impact Report (EIR) for the proposed Doris Avenue/Patterson Road Educational Facilities Project. The Native American Heritage Commission (NAHC) was contacted by email on January 13, 2016 to request a sacred lands file search. The NAHC responded on August 23, 2017 that no Native American cultural resources were identified by their search within the immediate Project area. The NAHC provided a list of Native American individuals and organizations that may have knowledge of tribal cultural resources or cultural resources in the Project area. Your name was included on the NAHC list and we are contacting you as part of our outreach efforts and data gathering to identify any known tribal cultural resources within the Project study area, or if you have any other questions or interest in the Project.

Project Location

The Project site is located at the corner of Doris Avenue and Patterson Road, on a portion of APN: 183-0-070-090, in unincorporated Ventura County, California. The project site is also within the City of Oxnard's Sphere of Influence (SOI) and City Urban Restriction Boundary (CURB). Please refer to the attached Project Location and Vicinity Map. The Project area is relatively flat and currently used for agriculture (row crops). The project site consists of approximately 25 acres. It is surrounded by adjacent agricultural uses to the south (further south is the Oxnard Airport), east and west. Located to the north of the project site is a residential neighborhood. Access to the project site is provided by North Patterson Road to the west and Doris Avenue to the north.

Project Description

The OSD proposes to construct and operate a new elementary, middle school and District administrative center. The new schools are needed to accommodate existing and anticipated future enrollment in the District. The proposed project would require annexation into the City of Oxnard (City). Annexation of the project area to the City would require Ventura Local Agency Formation Commission (LAFCo) approval of several changes of organization, collectively called reorganization.

The District will process a General Plan Amendment (GPA), Pre-Zone (RZ) and an Annexation through the City of Oxnard. The projects will be required to be reviewed and recommended for approval to the City Council by the Planning Commission at a noticed public hearing prior to the City Council's public hearing process and final action. If the project is approved by the City Council, the City will file a Resolution of Application with LAFCo. Upon approval of the annexation by LAFCo, and a 30-day reconsideration period, the annexation will be recorded and the site will be annexed into the City of Oxnard and eligible for all public services.

The proposed project includes joint-use facilities to support a district office, 700 elementary school students in grades K-5, and 1,200 middle school students in grades 6-8. The new school facilities are designed to meet the educational and recreational needs of K-8 students' onsite. In total, the proposed project would comprise approximately 178,678 square feet (sq. ft.) of building and structures and provide 220 parking spaces onsite. In addition, the proposed project includes a variety of play fields and recreational areas to accommodate the recreational needs of the K-8 student's onsite. These facilities include soccer fields, tennis courts, hard courts, and play fields that are located to the south of the school buildings.

The Project is subject to the requirements of the California Environmental Quality Act (CEQA), and OSD is the lead agency for CEQA. As part of the EIR, a cultural resources record and literature search was conducted on August 17, 2017, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at the California State University, Fullerton, California (IC File Number 17953.4033). The records search revealed that a total of 33 previous cultural resources investigation has been conducted within the Project study area (the Project Area of Potential Effect or APE and a 1-mile radius), and one linear previous investigation and no archaeological sites or historic resources are recorded within the Project's APE. An archeological survey of the APE has not been conducted at this time.

We understand that under AB 52, the lead State/public agency is responsible for formal government-to-government consultation with Native American tribes for this Project. This letter does not take the place of nor is it intended to serve as official government-to-government consultation.

I hope this information on the proposed Project has been helpful. Please contact me as soon as possible if you require any additional details regarding the Project and/or if you have any information about known tribal cultural resources within the Project study area that we should be aware of. Please reference "Doris-Patterson Educational Facilities Project" in your correspondence, and send any comments or questions to my attention at Tetra Tech, Inc., 2969 Prospect Park Dr. #100, Rancho Cordova, CA 95670, or call 916-853-4575, or email me at jenna.farrell@tetratech.com.

Sincerely,

Jenna Farrell
Cultural Resources, Tetra Tech

Attachment A: Maps

Westhaus, Randy

From: Longman, Renee
Sent: Friday, September 22, 2017 10:47 AM
To: 'cbcn.nahc.sb@gmail.com'
Cc: Farrell, Jenna
Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.
Attachments: Attachment_Maps.pdf

September 22, 2017

Mia Lopez, Chairperson
(805) 324-0135
cbcn.nahc.sb@gmail.com

Subject: The Doris Avenue/Patterson Road Educational Facilities Project, Ventura County, California.

Dear Mia Lopez:

Tetra Tech, Inc. is assisting the Oxnard School District (OSD or District) with a draft Environmental Impact Report (EIR) for the proposed Doris Avenue/Patterson Road Educational Facilities Project. The Native American Heritage Commission (NAHC) was contacted by email on January 13, 2016 to request a sacred lands file search. The NAHC responded on August 23, 2017 that no Native American cultural resources were identified by their search within the immediate Project area. The NAHC provided a list of Native American individuals and organizations that may have knowledge of tribal cultural resources or cultural resources in the Project area. Your name was included on the NAHC list and we are contacting you as part of our outreach efforts and data gathering to identify any known tribal cultural resources within the Project study area, or if you have any other questions or interest in the Project.

Project Location

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Sincerely,

Jenna Farrell
Cultural Resources, Tetra Tech

Attachment A: Maps

ENGINEERING GEOLOGY AND
GEOTECHNICAL ENGINEERING REPORT
FOR PROPOSED MIDDLE SCHOOL AT
THE SOUTHEAST CORNER OF
DORIS AVENUE AND PATTERSON ROAD,
OXNARD, CALIFORNIA

PROJECT NO.: VT-24867-10
SEPTEMBER 29, 2017

PREPARED FOR
OXNARD SCHOOL DISTRICT

BY
EARTH SYSTEMS SOUTHERN CALIFORNIA
1731-A WALTER STREET
VENTURA, CALIFORNIA



Earth Systems
Southern California

1731-A Walter Street
Ventura, CA 93003
(805) 642-6727
Fax (805) 642-1325

September 29, 2017

Project No.: VT-24867-10
Report No.: 17-9-86

Oxnard School District
c/o Chris Yafuso at CFW
1901 S. Victoria Avenue, Suite 106
Oxnard, CA 93035
cyafuso@aimcsworld.com

Project: Engineering Geology and Geotechnical Engineering Report for Proposed Middle School
Southeast Corner of Doris Avenue and Patterson Road
Oxnard, California

As authorized, we have performed a geotechnical study for a proposed middle school to be located southeast of the intersection of Doris Avenue and Patterson Road in the City of Oxnard, California. The accompanying Engineering Geology and Geotechnical Engineering Report presents the results of our subsurface exploration and laboratory testing programs, as well as our conclusions and recommendations pertaining to geotechnical aspects of project design. This report completes the scope of services described within our Proposal No. VP-17-140 dated May 26, 2017, and authorized by WAL 8 and Purchase Order P18-00223 dated June 28, 2017.

We have appreciated the opportunity to be of service to you on this project. Please call if you have any questions, or if we can be of further service.

Respectfully submitted,

EARTH SYSTEMS SOUTHERN CALIFORNIA

Patrick V. Boales
Patrick V. Boales
Engineering Geologist



9-29-17

Anthony P. Mazzei
Anthony P. Mazzei
Geotechnical Engineer



9/29/17

Copies: 2 - Oxnard School District c/o CFW (1 via US mail, 1 via email)
1 - Project File

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INTRODUCTION

This report presents results of an Engineering Geology and Geotechnical Engineering study performed for a proposed new school to be located on a 25-acre parcel southeast of the intersection of Doris Avenue and Patterson Road in the City of Oxnard, California (see Vicinity Map in Appendix A). The coordinates of the approximate center of the proposed building areas of the site are 34.2075° north latitude and 119.2055° west longitude.

Current plans by Flewelling and Moody indicate that the new campus for kindergarten through 8th grade will include approximately twelve buildings, three parking lots, numerous hardscaped areas, play courts, soccer fields, and a baseball or softball field. The proposed structures will include an Administration Building, a Media Center, a Visual Arts Building, a Conference Center, a Science Building, a Gymnasium, a Multi-Purpose Building, a District Office Building, a Kindergarten Building, and multiple two-story Classroom Buildings. It is understood that the elementary school will include 28 classrooms, and the middle school will include 48 classrooms.

The property is currently a farm used to grow row crops. The site is nearly level, but has a slight southward slope. There are no springs or seeps on the property.

Grading for the proposed project is expected to be limited to adjusting the grades to create level building pads, and preparing near-surface soils to support the new loads.

Structural considerations for column loads of up to 75 kips with maximum wall loads of 3.0 kips per lineal foot were used as a basis for the recommendations of this report. If actual loads vary significantly from these assumed loads, Earth Systems Southern California should be notified since reevaluation of the recommendations contained in this report may be required.

PURPOSE AND SCOPE OF WORK

The purpose of the geotechnical study that led to this report was to analyze the geology and soil conditions of the site with respect to the proposed improvements. These conditions include potential geohazards, surface and subsurface soil types, expansion potential, settlement potential, bearing capacity, and the presence or absence of subsurface water.

The scope of work included:

1. Reconnaissance and geological mapping of the site.
2. Reviewing and analyzing a stereographic pair of aerial photographs taken of the site and surrounding areas on October 25, 1945.
3. Reviewing pertinent geologic literature.
4. Drilling, sampling, and logging 16 borings to study geologic, soil, and groundwater conditions.
5. Advancing 12 cone penetrometer test (CPT) soundings to further study soil and groundwater conditions.
6. Laboratory testing of soil samples obtained from the subsurface exploration to determine their physical and engineering properties.
7. Consulting with owner representatives and design professionals.
8. Analyzing the geotechnical data obtained.
9. Preparing this report.

Contained in this report are:

1. Descriptions and results of field and laboratory tests that were performed.
2. Discussions pertaining to the local geologic, soil, and groundwater conditions.
3. Conclusions pertaining to geohazards that could affect the site.
4. Conclusions and recommendations pertaining to site grading and structural design.

GEOLOGY

A. Regional Geology

The site lies within the Ventura basin in the western portion of the Transverse Ranges geologic province. Numerous east-west trending folds and reverse faults indicative of ongoing north-south transpressional tectonics characterize the region. The school site is situated within the Oxnard Plain, where thicknesses of recent alluvium and shallow marine deposits that are at least 100 feet deep blanket the bedrock units.

The proposed K-8 school campus is not within any of the Fault Rupture Hazard Zones that have been delineated by the State of California. The Oak Ridge (Onshore) fault is the fault that is nearest to the site. It is a south dipping reverse fault that generally

parallels the south side of the Santa Clara River Valley. At its closest position to the school site (approximately 2.8 miles to the northwest of the campus), it is mapped as buried by alluvium. Portions of this fault are considered "active" by the State.

B. Stratigraphy

Bedrock was not encountered during the subsurface investigation, and it is anticipated that it is located more than one hundred feet below the existing ground surface. Natural earth materials underlying the subject site are alluvial deposits (Qal). Units encountered in the upper few feet within the test borings consisted of about sandy silts, which were generally underlain by interbeds of sandy silts and silty sands. Silty sands and clean sands were generally encountered below 20 feet.

C. Structure

Bedding attitudes were not measured within the alluvial deposits, but it is considered likely that bedding is oriented nearly parallel to the natural ground surface.

No faults or landslides were observed to be located on or trending into the subject property during the field study, during reviews of the referenced geologic literature, or during review of the aerial photographs taken of the site.

GEOLOGIC HAZARDS

Geologic hazards that may impact a site include seismic shaking, fault rupture, landsliding, liquefaction, seismic-induced settlement of dry sands, and flooding.

A. Seismic Shaking

1. Southern California is a seismically active region where the potential for significant ground shaking is universal. Earthquakes of a size large enough to cause structural damage are relatively common in the region. Per the State of California guidelines for these types of reports, when evaluating the seismicity potential of a specific site, it is general practice to look at the historical seismic record of the area and also review the site location with respect to mapped potentially active and active faults. By using this procedure, estimates of maximum ground accelerations are determined for consideration in structural design for buildings. The geotechnical community uses the method even though most are well aware of its shortcomings.

The most significant shortcomings relate to the presence of unknown seismogenic faults well below the surface, and the amount of uncertainty regarding the time intervals between earthquake events on many of the recognized faults. The 1983 Coalinga and 1994 Northridge Earthquakes are examples of relatively large events that occurred on previously unrecognized faults. Mankind has only been using instruments to monitor earthquakes since the 1930's, which is a relatively short time span considering that the intervals between large earthquakes on some of the regional faults are on the order of thousands of years. Considering the above, an evaluation of site acceleration potential will lead to a value that must be considered an approximation. The structural designers must be aware that there are inherent uncertainties in the determined value or range.

2. The Oxnard area has not experienced any local large earthquakes since records have been kept; however, regional earthquakes have led to significant ground shaking and structural damage. Notable regional earthquakes include the 1812 Santa Barbara Channel and 1857 Fort Tejon events. The epicenter of the 1812 earthquake is thought to have been in the western part of the Santa Barbara channel. Associated with this earthquake, a tsunami with a disputed run up height of up to 15 feet impacted the Ventura coastal area. On January 9, 1857, the Fort Tejon earthquake with an estimated Richter magnitude of 8.25 impacted the region. According to C.D.M.G. (1975), the earthquake caused the roof of the Mission San Buenaventura to fall in.
3. One measure of ground shaking is intensity. The Modified Mercalli Intensity Scale of ground shaking ranges from I to XII with XII indicating the maximum possible intensity of ground movement. Structural damage begins to occur when the intensity exceeds a value of VI. Southern Ventura County has been mapped by the California Division of Mines and Geology to delineate areas of varying predicted seismic response. The Alluvium that underlies the subject area is mapped as having a probable maximum intensity of earthquake response of approximately IX on the Modified Mercalli Scale. Historically, the highest estimated intensity in the Oxnard area has been VII (CDMG, 1975, 1994).
4. The school site, like any other site in the region, is subject to relatively severe ground shaking in the event of a maximum earthquake on a nearby fault. In

Appendix C is a regional fault location map that shows the site's relationship to the identified faults in the region. Also in Appendix C is a summary table listing well-identified faults within a 60-km radius of the school, the distance between each fault and the school, and mean earthquake magnitudes that could occur on each of the listed faults. A proprietary program utilizing the State of California's fault model (CGS and USGS, 2008) was used to prepare the list.

5. For school projects, the 2016 California Building Code (CBC) specifies that peak ground acceleration for design purposes can be determined from a site-specific study taking into account soil amplification effects. The United States Geological Survey (USGS, 2009) has undertaken a probabilistic earthquake analyses that covers the continental United States. A reasonable site-specific spectral response curve may be developed from USGS Unified Hazard Tool web page, which adjusts for site-specific ground factors. The interactive webpage appears to be a precise calculation based on site coordinates. The program incorporates the 2008 USGS/CGS working group consensus methodologies, and the output for base ground motion is a smooth curve based on seven spectral ordinates ranging from 0 to 2 seconds. The USGS interactive deaggregation spectral values are generally within about 5% of the precise site-specific values obtained from other programs such as OpenSHA or EZ-FRISK for the same model and attenuation relationships.

The NGA (Next Generation Attenuation) relationships for spectral response have been used in the analyses. A principal advantage in the NGA relationships is that the estimated site-specific soil velocity (V_{s30}) is used directly for site specific analysis rather than the NEHRP site corrections. The analysis also includes amplification factors (Idriss, 1993) to model the maximum rotated component of the ground motion.

For school projects, the seismic design values are referenced to the Maximum Considered Earthquake (MCE) and, by definition, the MCE has a 2% probability of occurrence in a 50-year period. This equates to a return rate of 2,475 years. Spectral acceleration parameters that are applicable to seismic design are presented in Appendix C. It should be noted that the school project carries a seismic importance factor I of 1.25 and that factor has been incorporated into the 2013 and 2016 California Building Code response spectrums. The subject site is

within Seismic Design Category E. Calculations indicate that the site class of on-site soils is Site Class E. The velocity (V_{s30}) was assumed to be 150 meters per second when adjusting for site class. For the "general procedure" (i.e. code value, or probabilistic) analysis, the Short Period Spectral Response (S_S) for the Maximum Considered Earthquake (MCE) was found to be 2.945 g, and the 1-Second Spectral Response (S_1) was found to be 0.917 g. Site Coefficients F_a and F_v were found to be 0.90 and 2.40, respectively. The spectral Response Parameter S_{MS} was found to be 2.246 g, and S_{M1} was found to be 2.201 g. The Short Period Spectral Response (S_{DS}) was found to be 1.497 g, and the 1 Second Spectral Response (S_{D1}) was found to be 1.467 g.

Because the S_1 value is greater than 0.75 g, and the site is in Seismic Design Category E, a site-specific (deterministic) analysis is also required. For the Site-Specific Analysis, the Short Period Spectral Response (S_{DS}) was found to be 1.198 g, and the 1 Second Spectral Response (S_{D1}) was found to be 1.312 g. Both the "site specific" and "general procedure yielded peak ground accelerations of 0.873 g.

6. California has had several large earthquakes in this century, and studies on the structural effects of the ground shaking have led to changes in the building codes. After the 1933 Long Beach Earthquake, the State of California Field Act was written with the intention of making public schools more earthquake resistant. The intent of the act, as is the intent of the most modern codes, is as follows: "School buildings constructed pursuant to these regulations are expected to resist earthquake forces generated by major earthquakes in California without catastrophic collapse, but may experience some repairable architectural or structural damage". Following the 1971 San Fernando Earthquake, many changes were made to the public school building codes. After the 1994 Northridge Earthquake, a study of 127 public schools in the Los Angeles area by the State of California Division of the State Architect (1994a) revealed that the intent of the Field Act was being met even when buildings were subjected to horizontal accelerations approaching 0.9 g (much higher than expected) over a large area. None of the schools collapsed and most of the damage that would have caused injury to students, had school been in session, was from failures of non-structural items such as light fixtures, florescent bulbs, suspended ceilings, etc. Most of the schools that experienced these non-structural failures were built before the

changes to the building code that applied to these non-structural items. The study also resulted in recommended changes to building codes regarding steel framed school buildings, (State of Calif. Div. of State Architect, 1994b).

B. Fault Rupture

Surficial displacement along a fault trace is known as fault rupture. Fault rupture typically occurs along previously existing fault traces. As mentioned in the "Structure" section above, no existing fault traces were observed to be crossing the site. As a result, it is the opinion of this firm that the potential for fault rupture on this site is low.

It should be noted that the site is located within the Fault Displacement Hazard Zone for the Camarillo Fault, as originally mapped in the County of Ventura Seismic Safety Element (1974). The mapping shows the fault zone to be approximately one-mile wide near the site. None of the other referenced mappings include the subject site near a mapped fault zone, and the other mappings are nearly all significantly more recent than the mapping included in the Seismic Safety Element.

C. Landsliding and Rock Fall

As mentioned previously, the subject site is relatively flat. As a result, it appears that the hazards posed by landsliding and rock fall are considered nil.

D. Liquefaction, Cyclic Softening, and Lateral Spreading

Earthquake-induced cyclic loading can be the cause of several significant phenomena, including liquefaction in fine sands and silty sands. Liquefaction results in a loss of strength and can cause structures to settle or even overturn if it occurs in the bearing zone. Cyclic softening in clays during earthquakes has resulted in buildings experiencing foundation failure and ground surface deformation similar to that resultant from liquefaction. If liquefaction or cyclic softening occurs beneath sloping ground, a phenomenon known as lateral spreading can occur. Liquefaction and cyclic softening is typically limited to the upper 50 feet of the subsurface soils. There are a number of conditions that need to be satisfied for liquefaction or cyclic softening to occur. Of primary importance is that groundwater, perched or otherwise, usually must be within the upper 50 feet of soils.

The subject site is located within one of the Liquefaction Hazard Zones delineated by the State of California (CGS, 2002b).

Earthquake-induced vibrations can be the cause of several significant phenomena, including liquefaction in fine sands and silty sands. Liquefaction results in a loss of strength and can cause structures to settle or even overturn if it occurs in the bearing zone. Liquefaction is typically limited to the upper 50 feet of soils underlying a site.

Fine sands and silty sands that are poorly graded and lie below the groundwater table are the soils most susceptible to liquefaction. Soils that have I_c values greater than 2.6, soils with plasticity indices (PI) greater than 7, sufficiently dense soils, and/or soils located above the groundwater table are not generally susceptible to liquefaction.

An examination of the conditions existing at the site, in relation to the criteria listed above, indicates the following:

1. Groundwater was found under this site at depths ranging from 14 feet in Boring B-2 to 22.5 feet in Boring B-12. Groundwater was not encountered in several borings advanced to depths of 21.5 feet, and the water encountered in Boring B-2 appears to have been a localized perched water zone. A mapping of historic high groundwater levels in the subject area by the State shows the site to have a high groundwater level of about 6 feet below the surface (CGS, 2002a). (A copy of the map of historic high groundwater levels is provided in Appendix A.) Based on these data, we have assumed depths to high groundwater of 6 feet and 22.5 feet in our liquefaction analyses.
2. CPT readings yielded some I_c values greater than 2.6, which is generally considered the boundary between soils prone and not prone to liquefaction (see Appendix B). However, further correlations with laboratory test results discussed below indicated that a few of the layers with I_c values greater than 2.6 were potentially liquefiable. Thus, for the purposes of this study, it was assumed that only soils with I_c values greater than 2.75 were considered non-liquefiable.
3. Atterberg limit evaluations indicate that some of the finer grained soils have PI's in the range of 5 and 15, and classify as ML or CL. Those soils with PI's greater than 7 classify as CL, and are expected to exhibit clay-like behavior during earthquake cyclic loading.

4. Standard penetration tests conducted in the borings, and SPT blowcounts interpreted from CPT data, indicate that soils within the tested depth are in a variably dense state.

Based on the above, cyclic mobility analyses were undertaken to analyze the liquefaction potentials of the various soil layers. The analyses were performed in general accordance with the methods proposed by NCEER (1997). In each analysis, the design earthquake was considered to be a 7.2 moment magnitude event. The peak ground acceleration was assumed to be 0.873 g, as per the discussion in the "Seismicity and Seismic Design" section of this report.

Analyses were performed for each of the four deep CPT soundings (CPT-1, CPT-4, CPT-6, and CPT-10), and for each of the four deep mud rotary borings (B-12, B-13, B-15, and B-16). As noted above, each analysis was performed for two different depths to groundwater (6 feet and 22.5 feet).

A summary table of the findings, along with the findings of seismic-induced settlement of dry sands, is provided below.

Summary of Liquefaction and Seismic-Induced Settlement Analyses
with Groundwater at 6 feet

CPT/Boring ID	CPT-1	B-12	CPT-4	B-15	CPT-6	CPT-10	B-13	B-16
Combined Thickness of Potential Settlement Zones	15.3'	12.5'	15.7'	9.0'	6.9'	8.9'	5.0'	11.5'
Potential Settlement of Liquefiable Zones	3.4"	3.4"	2.9"	1.8"	1.2"	1.7"	1.2"	2.4"
Potential Settlement of Dry Sand Zones	0.0"	0.0"	0.0"	0.0"	0.0"	0.1"	0.0"	0.0"
Potential Total Settlement of Combined Zones	3.4"	3.4"	2.9"	1.8"	1.2"	1.8"	1.2"	2.4"
Potential Differential Settlements	1.7"	1.7"	1.5"	0.9"	0.6"	0.9"	0.6"	1.2"
Shallowest Liquefiable Zone	9'-11'	6'-16.5'	9'-13'	10'-12'	6.5'-7.5'	6'-9'	17.5'-22.5'	10'-21.5'
Ground Damage	Maybe	-	Maybe	-	Maybe	Maybe	-	-
Lateral Spreading	0.8'	-	1.9'	-	1.2'	0.5'	-	-

Summary of Liquefaction and Seismic-Induced Settlement Analyses
with Groundwater at 22.5 feet

CPT/Boring ID	CPT-1 B-12	CPT-4 B-15	CPT-6	CPT-10 B-13	B-16
Combined Thickness of Potential Settlement Zones	8.9' 13.5'	8.4' 12.5'	3.0'	3.4' 7.0'	16.5'
Potential Settlement of Liquefiable Zones	1.7" 0.3"	1.4" 0.0"	0.5"	0.6" 0.0"	0.0"
Potential Settlement of Dry Sand Zones	0.3" 0.8"	0.2" 0.3"	0.1"	0.2" 0.2"	0.4"
Potential Total Settlement of Combined Zones	2.0" 1.1"	1.6" 0.3"	0.6"	0.8" 0.2"	0.4"
Potential Differential Settlements	1.0" 0.6"	0.8" 0.2"	0.3"	0.4" 0.1"	0.2"
Shallowest Liquefiable Zone	25'-29' 25'-27'	23'-25' NA	23'-24'	44'-47.4' NA	NA

More detailed descriptions of the analyses are as follows:

Analysis for Area near CPT-1 and B-12 (Northwest Area of Campus)

The analysis for soils encountered in CPT-1 when groundwater was assumed to be at 6 feet indicated that approximately 15.3 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 9 and 11 feet (see Appendix D for calculations). The analysis for soils encountered in B-12, which is the boring nearest to CPT-1, when groundwater was assumed to be at 6 feet indicated that approximately 12.5 feet of the upper 52.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 6 and 16.5 feet. The volumetric strain for the potentially liquefiable zones in CPT-1 and B-12 were estimated using a chart derived by Tokimatsu and Seed (1987) after reducing the N_{160} values by the calculated "FC Delta" value, then making adjustments for fines content as per Seed (1987) and SCEC (1999). Using this methodology, the volumetric strain in both CPT-1 and B-12 was found to be approximately 3.4 inches.

The analysis for soils encountered in CPT-1 when groundwater was assumed to be at a depth of 22.5 feet indicated that approximately 8.9 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 25 and 29 feet. The analysis for soils encountered in B-12 when groundwater was

assumed to be at 22.5 feet indicated that approximately 14.5 feet of the upper 52.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 25 and 27 feet. The volumetric strain for the potentially liquefiable zones in CPT-1 and B-12 were estimated to be approximately 1.7 inches and 0.3 inches, respectively.

According to SCEC (1999), up to about half of the total settlement could be realized as differential settlement. Assuming the worst-case among the analyses described above for this area of the campus, differential settlement, when seismic-induced settlement of dry sands is factored in, could range up to about 1.7 inches at the ground surface.

Analysis for Area near CPT-4 and B-15 (South-Central Area of Campus Building Clusters)

The analysis for soils encountered in CPT-4 when groundwater was assumed to be at 6 feet indicated that approximately 15.7 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 9 and 13 feet. The analysis for soils encountered in B-15, which is the boring nearest to CPT-4, when groundwater was assumed to be at 6 feet indicated that approximately 9 feet of the upper 50 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 10 and 12 feet. The volumetric strain for the potentially liquefiable zones in CPT-4 and B-15 were estimated to be approximately 2.9 inches, and 1.8 inches, respectively.

The analysis for soils encountered in CPT-4 when groundwater was assumed to be at a depth of 22.5 feet indicated that approximately 8.4 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 23 and 25 feet. The analysis for soils encountered in B-15 when groundwater was assumed to be at 14 feet indicated that no horizons within the upper 50 feet of the soil profile were potentially liquefiable. The volumetric strain for the potentially liquefiable zones in CPT-4 were estimated to be approximately 1.4 inches.

Assuming the worst-case among the analyses described above for this area of the campus, differential settlement could range up to about 1.5 inches at the ground surface.

Analysis for Area near CPT-6 (North-Central Area of Campus Building Clusters)

The analysis for soils encountered in CPT-6 when groundwater was assumed to be at 6 feet, indicated that approximately 6.9 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 6.5 and 7.5 feet. The volumetric strain for the potentially liquefiable zones was estimated to be approximately 1.2 inches.

The analysis for soils encountered in CPT-6 when groundwater was assumed to be at 22.5 feet, indicated that approximately 3.0 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 23 and 24 feet. The volumetric strain for the potentially liquefiable zones was estimated to be approximately 0.5 inches.

Assuming the worst-case among the analyses described above for this area of the campus, differential settlement could range up to about 0.6 inches at the ground surface.

Analysis for Area near CPT-10 and B-13 (Southeastern Area of Campus Building Clusters)

The analysis for soils encountered in CPT-10 when groundwater was assumed to be at 6 feet, indicated that approximately 8.9 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 6 and 9 feet. The analysis for soils encountered in B-13, which is the boring nearest to CPT-10, when groundwater was assumed to be at 6 feet, indicated that approximately 5 feet of the upper 50 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 17.5 and 22.5 feet. The volumetric strain for the potentially liquefiable zones in CPT-10 and B-13 were estimated to be approximately 1.7 inches, and 1.2 inches, respectively.

The analysis for soils encountered in CPT-10 when groundwater was assumed to be at 22.5 feet indicated that approximately 3.4 feet of the upper 64.5 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 44 and 47.4 feet. The analysis for soils encountered in B-13 when groundwater was assumed to be at 22.5 feet, indicated no horizons within the upper 50 feet of the soil profile were potentially liquefiable. The volumetric strain for the potentially liquefiable zones in CPT-10 was estimated to be approximately 0.6 inches.

Assuming the worst-case among the analyses described above for this area of the campus, differential settlement could range up to about 0.9 inches at the ground surface.

Analysis for Area near B-16 (Northeastern Area of Campus Building Clusters)

The analysis for soils encountered in B-16, which is near the northeast corner of the site, when groundwater was assumed to be at 6 feet, indicated that approximately 11.5 feet of the upper 50 feet of the soil profile were potentially liquefiable, with the shallowest zone at depths between 10 and 21.5 feet. The volumetric strain for the potentially liquefiable zones was estimated to be approximately 2.4 inches.

The analysis for soils encountered in B-16 when groundwater was assumed to be at 22.5 feet, indicated that no horizons within the upper 50 feet of the soil profile were potentially liquefiable.

Assuming the worst-case among the analyses described above for this area of the campus, differential settlement could range up to about 1.2 inches at the ground surface.

Lateral Spreading

"Free face" lateral spreading does not appear to pose a potential hazard because there are no nearby sloped areas or canyons (Bartlett and Youd, 1995). However, "ground slope" lateral spreading, sometimes referred to as "ground oscillation", can occur when adjusted blow counts ($N_{1(60)}$) measured within potentially liquefiable zones are less than or equal to 15. Zones with these characteristics were identified through analysis of each of the four deep CPT soundings spread throughout the site. The cumulative thickness of these layers ranged from 3 feet in CPT-6 to 8 feet in CPT-1, or about 1 to 2.5 meters, respectively. Isolated layers of potentially liquefiable with a thickness of 6 inches or less were not included in the total thickness.

The potential ground oscillation was analyzed in accordance with procedures developed by Youd, Hansen and Bartlett (2002). In the analyses, it was assumed that the surface slope was 0.3%, which is equivalent to about 5 feet of fall in 1,500 feet, as measured from the Oxnard Quadrangle near the subject site. Fine contents used in the analyses

were based on conservative weighting of the interpreted fine contents listed within the CPT data, and on hydrometer testing performed on samples gathered during subsurface studies.

Based on a historical high groundwater level of about 6 feet below the surface, the cumulative displacements were calculated to range from approximately 0.5 feet in the vicinity of CPT-10 to 1.9 feet in the vicinity of CPT-4, if all zones were to liquefy simultaneously. (Calculations are included within Appendix D of this report.)

According to data generated by Ishihara (National Academy Press, 1985) and CDMG, despite the relatively thick zone of non-liquefiable soils above those relatively thin horizons with blowcounts less than 10, "ground" damage could occur related to lateral spreading/ground oscillation. (Examples of ground damage are sand boils and ground cracks.)

Clay Sensitivity

Based on the measured liquidity indices, the majority of the clay layers at the site do not appear to be sensitive. Hence, strength loss and post-liquefaction consolidation are not thought to be significant concerns. Furthermore, most of the clay lenses are only a few feet thick, and by themselves, cannot lead to much post-liquefaction consolidation. Therefore, cyclic softening of clays and post-liquefaction settlement from consolidation of clays disturbed by a design level earthquake do not appear to be significant at the subject site.

E. Seismic-Induced Settlement of Dry Sands

Sands tend to settle and densify when subjected to earthquake shaking. The amount of settlement is a function of relative density, cyclic shear strain magnitude, and the number of strain cycles. A procedure to evaluate this type of settlement was developed by Seed and Silver (1972) and later modified by Pyke, et al (1975). Tokimatsu and Seed (1987) presented a simplified procedure that has been reduced to a series of equations by Pradel (1998).

To analyze this phenomenon, the Tokimatsu and Seed procedure, as implemented by Pradel, was used. The site acceleration and earthquake magnitude used in the analysis were a modal magnitude of 7.2, and an acceleration of 0.58 g (based two-thirds of the

PGAm of 0.873 g). Seismic settlement was analyzed assuming groundwater depths of 6 feet and 22.5 feet, as was done for the liquefaction analyses discussed above. In the analyses, it was assumed that at least the upper 5 feet of the soil profile will be removed and recompacted during grading for the project, and this depth was assumed to not be susceptible to seismic induced settlement.

The calculations, which are summarized in the Summary tables in the Liquefaction section of this report, indicate that seismically-induced settlements could range up to about 0.8 inches near B-12 if groundwater remains at 22.5 feet, with all other calculations yielding estimates of 0.4 inches or less. About one-half of the total settlement, i.e. 0.4 inches of 0.8 inches, could be experienced as differential settlement.

F. Flooding

Earthquake-induced flooding types include tsunamis, seiches, and reservoir failure. Due to the inland location of the site, hazards from tsunamis and seiches are considered extremely unlikely, and the site is not within the tsunami hazard zone near the Pacific Ocean that has been delineated by California Emergency Management Agency (2009).

If a reservoir, such as Lake Piru or Lake Castaic, was to fail, it would drain into the Santa Clara River channel. A search for mapping of potential flooding related to dam failure was attempted, but no mapping could be located. However, it is assumed that a minor amount of flooding could occur, but would be expected to be relatively minor, and should not be considered a significant potential hazard given dam maintenance and safety measures that are in place.

The site is not within a stippled "Zone X" flood zone (FEMA, 2010), which is defined as "Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage area with less than 1 square mile; and areas protected by levees from 1% annual chance flood". From this, it appears that storm-induced flooding could inundate the site on rare occasions, but probably would not pose a hazard to the proposed project.

SOIL CONDITIONS

Near-surface soils with the anticipated bearing zones of the proposed building areas are generally alluvial silty sands and sandy silts. Soils encountered at approximate bearing depths are characterized by low blow counts and in-place densities, and moderate compressibilities. Testing indicates that anticipated bearing soils lie in the "very low" to "low" expansion ranges. [A locally adopted version of this classification of soil expansion is included in Appendix B of this report.] It appears that soils can be cut by normal grading equipment, although soils are at relatively high moisture contents at shallow depths, and may require drying prior to use as structural fill.

Groundwater was found under this site at depths ranging from 14 feet in Boring B-2 to 22.5 feet in Boring B-12. Groundwater was not encountered in several borings advanced to depths of 21.5 feet, and the water encountered in Boring B-2 appears to have been a localized perched water zone. A mapping of historic high groundwater levels in the subject area by the State shows the site to have a high groundwater level of about 6 feet below the surface (CGS, 2002a). (A copy of the map of historic high groundwater levels is provided in Appendix A.)

Samples of near-surface soils were tested for pH, resistivity, soluble sulfates, and soluble chlorides. The test results provided in Appendix B should be distributed to the design team for their interpretations pertaining to the corrosivity or reactivity of various construction materials (such as concrete and piping) with the soils. It should be noted that sulfate contents (ranging from 3,600 to 4,500 mg/Kg) are in the "S2" ("severe") exposure class of Table 19.3.1.1 of ACI 318-14; therefore, it appears that special concrete designs with Type V Portland cement, a maximum water to concrete ratio of 0.45, and a minimum 28-day compressive strength of 4,500 psi will be necessary for the measured sulfate contents.

Based on criteria established by the County of Los Angeles (2013), measurements of resistivity of near-surface soils (ranging from 390 to 450 ohms-cm) indicate that they are "severely corrosive" to ferrous metal (i.e. cast iron, etc.) pipes.

GEOTECHNICAL ENGINEERING
CONCLUSIONS AND RECOMMENDATIONS

The site is suitable for the proposed development from Engineering Geology and Geotechnical Engineering standpoints provided that the recommendations contained in this report are successfully implemented into the project. Mitigation of the potential effects of liquefaction, including potential differential settlements ranging up to about 2.0 inches, and potential lateral spreading up to about 1.3 feet, will be required. Recommendations that include the use of a geogrid-reinforced aggregate base section below structures, while also using a conventional foundation with some structural enhancements, are provided in the "Rough Grading/Areas of Development" and "Conventional Foundations" sections below. As an alternative to the grading/reinforced conventional foundation solution, recommendations for design of a structural mat slab are provided in the "Mat Foundations" section of this report.

The recommendations presented within do not address post-earthquake performance in regard to flatwork, pavements, etc. It is our opinion that it is not practically feasible to mitigate or reduce the potential for the occurrence of seismically-induced settlement across the whole site due to the susceptible nature of the site soils. The manifestation and effect of seismically-induced settlement may generally affect the flatwork, pavement, etc. through differential settlement of the affected soils after seismic shaking. These effects may cause localized distress to the portions of the site where seismically-induced settlement occurs. It is our opinion that it may not be economically feasible or cost effective to implement engineering measures to mitigate the potential effects of seismically-induced settlement. It is our opinion that the effects of seismically-induced settlement will most likely require repair to portions of the site flatwork/pavement after a major seismic event generally in the form of re-leveling. Selective design utilizing less sensitive fencing, deep foundations, etc. can also reduce the impact of seismically-induced settlement

A. Grading

1. Pre-Grading Considerations

- a. Plans and specifications should be provided to Earth Systems Southern California prior to grading. Plans should include the grading plans, foundation plans, and foundation details.
- b. Grading at a minimum should conform to the 2016 California Building Code.

- c. Roof draining systems, if required by the appropriate jurisdictional agency, should be designed so that water is not discharged into bearing soils or near structures.
 - d. Final site grade should be designed so that all water is diverted away from the structures over paved surfaces, or over landscaped surfaces in accordance with current codes. Water should not be allowed to pond anywhere on the pad.
 - e. Shrinkage of soils affected by compaction is estimated to be about 12 percent.
 - f. Improvements below ground level, if any, should be waterproofed and drained in accordance with the Project Architect's recommendations.
 - g. It is recommended that Earth Systems Southern California be retained to provide Geotechnical Engineering services during site development and grading, and foundation construction phases of the work to observe compliance with the design concepts, specifications and recommendations, and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.
 - h. Compaction tests shall be made to determine the relative compaction of the fills in accordance with the following minimum guidelines: one test for each two-foot vertical lift; one test for each 1,000 cubic yards of material placed; and two tests at finished subgrade elevation in each building pad.
2. General Rough Grading Recommendations
- a. The existing ground surface should be initially prepared for grading by removing all vegetation, trees, large roots, debris, other organic material and non-complying fill. Organics and debris should be stockpiled away from areas to be graded, and ultimately removed from the site to prevent their inclusion in fills. Voids created by removal of such material should be properly backfilled and compacted. No compacted fill should be placed unless the underlying soil has been observed by the Geotechnical Engineer.
 - b. Areas not within a building footprint, or the recommended 5-foot zone outside the building envelope, that will support exterior slabs-on-grade, sidewalks, and pavements should be excavated a minimum of 2.5 feet below finished subgrade to extend below the anticipated depths of plowing that have been developed during farming. The limits of the overexcavated zones should extend at least 2 feet beyond the outside edges of the proposed improvements. The resulting surface should then be scarified to a depth of

6 inches, uniformly moisture-conditioned to above optimum moisture content, and compacted to achieve a relative compaction of between 90 percent of the ASTM D 1557 maximum dry density. Compaction of the prepared subgrade should be verified by testing prior to the placement of engineered fill.

- c. The bottom of all excavations should be observed by a representative of this firm prior to processing or placing fill.
- d. On-site soils may be used for fill once they are cleaned of all organic material, rock, debris and irreducible material larger than 8 inches. However, soils may be at moisture contents above optimum, and may require drying prior to placing them as structural fill.
- e. Fill and backfill placed at near optimum moisture in layers with loose thickness not greater than 8 inches should be compacted to a minimum of 90 percent of the maximum dry density obtainable by the ASTM D 1557 test method.
- f. Import soils used to raise site grade should be equal to, or better than, on-site soils in strength, expansion, and compressibility characteristics. Import soil can be evaluated, but will not be prequalified by the Geotechnical Engineer. Final comments on the characteristics of the import will be given after the material is at the project site.
- g. If pumping soils or otherwise unstable soils are encountered during the overexcavation, stabilization of the excavation bottom will be required prior to placing fill. This can be accomplished by various means. The first method would include drying the soils as much as possible through scarification, and working thin lifts of "6-inch minus" crushed angular rock into the excavation bottom with small equipment (such as a D-4) until stabilization is achieved. Use of a geotextile fabric such as Mirafi 500X, or Tensar TX-170, or the equivalent, is another possible means of stabilizing the bottom. If this material is used, it should be laid on the excavation bottom and covered with approximately 12 inches of "6-inch minus" crushed angular rock prior to placement of filter fabric (until the bottom is stabilized). The rock should then be covered with a geotextile filter fabric before placing fill above. It is possible that stabilization will be necessary due to the existing high moistures of the soils, and due to the potential for shallow groundwater if subsurface conditions change between the writing of this report and the start of construction. Unit prices should be obtained from the Contractor in advance for this work.

3. Rough Grading/Areas of Development Assuming Geogrid-Reinforcement Option

- a. To minimize the propagation of seismically-induced ground damage to the proposed buildings, and to minimize differential settlements, native soils throughout the proposed building footprints should be excavated a minimum of 6 feet below existing grade or 4 feet below the bottoms of foundations, whichever is deeper. (“Buildings” should be considered to include attached structural elements such as stairways, and also include masonry enclosures.) Overexcavation should be extended laterally to a distance of at least 5 feet laterally beyond the outside edge of the foundation footprint. (Foundations for elevator pits need not be considered when determining overexcavation depths, unless elevator pit foundations extend more than 2 feet deeper than the rest of the foundations. In that case, the overexcavation depth should be at least 2 feet below the depth of the elevator pit foundations.) The base of the overexcavation should be relatively level. Structural plans and details should be checked carefully during grading to establish the actual bottom of foundation elevations in the field. The bottoms of the remedial excavations should be scarified to a depth of 6 inches, uniformly moisture conditioned to above optimum moisture content, and compacted to achieve a relative compaction of between 90 percent of the ASTM D 1557 maximum dry density. Compaction of the prepared subgrade should be verified by testing prior to the placement of engineered fill.
- b. To further minimize the propagation of potential liquefaction-induced differential settlements and/or lateral spreading, the fill should be reinforced with two layers of “geogrids” to create a mat of reinforced soil beneath the proposed structures. (This will also create a reinforced mat of soil that should mitigate the potential movements posed by ground oscillation.) The reinforcing geogrids should consist of Tensar Tri-Axial TX160, or equivalent approved by the Geotechnical Engineer. We recommend that the first layer of geogrid be placed on the prepared subgrade at the bottom of the remedial excavations, extend across the entire area of overexcavation, and extend up the sidewalls of the remedial excavations. A 1-foot thick layer of “clean” aggregate base should be placed in thin, moisture conditions lifts, and compacted over the bottom layer of geogrid. (“Clean” aggregate base is defined as having no asphalt content, which would not pass DTSC

requirements for school projects.) The second layer of geogrid should be placed on the top of the aggregate base, and an additional one foot of “clean” aggregate base material should be placed and compacted. The second layer need not be extended up the sidewalls. Once the second lift of aggregate base material has been placed and compacted, the bottom layer of geogrid extending up the sidewall of the remedial excavation, should be folded back onto the compacted surface to create a 10-foot overlap. The aggregated base material should be uniformly moisture conditioned and compacted to achieve a minimum relative compaction of 95% of the ASTM D 1557 maximum dry density. The remedial excavation may then be brought up to finished grade using the excavated soil. The geogrid layers should be installed in accordance with the manufacturer’s recommendations. Where adjacent geogrid rolls are to be placed, a minimum overlap of 18 inches should be used. Underground utilities should be installed above the geogrid where practical or to splice geogrid reinforcement over utility trenches if it is necessary to place utilities below the geogrid. Underground utilities may be run through the geogrids along the sidewalls of the remedial excavations, but care should be taken to minimize the width of the trench, and to cut the geogrid only where the trench projects through the sidewalls.

4. Rough Grading/Areas of Development Assuming Structural Mat Slab Option
 - a. If a structural mat slab option is chosen to minimize the potential effects of liquefaction, native soils throughout the proposed building footprints should be excavated a minimum of 6 feet below existing grade or 4 feet below the bottoms of foundations, whichever is deeper. (Foundations for elevator pits need not be considered when determining overexcavation depths, unless elevator pit foundations extend more than 2 feet deeper than the rest of the foundations. In that case, the overexcavation depth should be at least 2 feet below the depth of the elevator pit foundations.) Overexcavation should be extended laterally to a distance of at least 5 feet laterally beyond the outside edge of the foundation footprint. The base of the overexcavation should be relatively level. Structural plans and details should be checked carefully during grading to establish the actual bottom of foundation elevations in the field. The bottoms of the remedial excavations should be scarified to a depth of 6 inches, uniformly moisture conditioned to near optimum moisture content,

and compacted to achieve a relative compaction of between 90 percent of the ASTM D 1557 maximum dry density. Compaction of the prepared subgrade should be verified by testing prior to the placement of engineered fill.

- b. The overexcavated zone should then be backfilled with thin lifts of moisture conditioned on-site soils compacted to a minimum of 90% of maximum dry density.

5. Utility Trenches

- a. Utility trench backfill should be governed by the provisions of this report relating to minimum compaction standards. In general, on-site service lines may be backfilled with native soils compacted to 90 percent of maximum density. Backfill of offsite service lines will be subject to the specifications of the jurisdictional agency or this report, whichever are greater.
- b. Compacted native soils should be utilized for backfill below structures. Sand should not be used under structures because it provides a conduit for water to migrate under foundations.
- c. Backfill operations should be observed and tested by the Geotechnical Engineer to monitor compliance with these recommendations.
- d. Excavated soils below a depth of approximately 2 feet are expected to be at a high moisture content, and drying may be necessary before utilizing them as compacted backfill. In the unlikely event that water is present in trenches, the lower sections should be backfilled with gravel to at least 6 inches above the water.

B. Structural Design

1. Conventional Foundations with Geogrid-Reinforced Aggregate Base Section Below

- a. Conventional continuous footings and/or pad footings may be used to support structures, assuming the grading with a geogrid-reinforced zone is also installed below the structure. Pad footings must be tied together by grade beams (each way), and grade beams should also extend from pads to adjacent perimeter footings. The intent of the grade beams is to provide additional stiffness to the foundation to help mitigate potential liquefaction-related effects. Perimeter footings for one-story buildings should have a minimum embedment depth of 15 inches, and interior pad footings should have a

minimum embedment depth of 12 inches. For two-story buildings, perimeter and interior footings should have a minimum embedment depth of 18 inches.

- b. Footings should bear into firm recompacted soils, as recommended elsewhere in this report. Foundation excavations should be observed by a representative of this firm after excavation, but prior to placing of reinforcing steel or concrete, to verify bearing conditions.
 - c. Conventional continuous footings may be designed based on an allowable bearing value of 2,000 psf. This value is based on a factor of safety of at least 3.
 - d. Isolated pad footings may be designed based on an allowable bearing value of 2,200 psf. This value is based on a factor of safety of 3.
 - e. Allowable bearing values are net (weight of footing and soil surcharge may be neglected) and are applicable for dead plus reasonable live loads.
 - f. Bearing values may be increased by one-third when transient loads such as wind and/or seismicity are included.
 - g. Lateral loads may be resisted by soil friction on floor slabs and foundations and by passive resistance of the soils acting on foundation stem walls. Lateral capacity is based on the assumption that any required backfill adjacent to foundations and grade beams is properly compacted.
 - h. Continuous footings bottomed in soils in the "low" expansion range should be reinforced, at a minimum, with one No. 4 bar along the bottom and one No. 4 bar along the top. In addition, bent No. 3 bars on 24-inch centers should extend from within the footings to a minimum of 3 feet into adjacent slabs to further aid in stiffening the foundation.
 - j. Bearing soils in the "low" expansion range should be premoistened to 120 percent of optimum moisture content to a depth of 21 inches below lowest adjacent grade. Premoistening should be confirmed by testing.
2. Conventional Slabs-on-Grade
- a. Concrete slabs should be supported by compacted structural fill as recommended elsewhere in this report.
 - b. It is recommended that perimeter slabs (walks, patios, etc.) be designed relatively independent of footing stems (i.e. free floating) so foundation adjustment will be less likely to cause cracking.

- c. The information that follows regarding design criteria for slabs is generally the same as that given in Table 18-I-D for the "low" expansion range. Actual slab designs should be provided by the Structural Engineer, but the reinforcement and thicknesses of sand he recommends should not be less than the criteria set forth in Table 18-I-D for the appropriate expansion range.
- d. Slabs bottomed on soils in the "low" expansion range should be underlaid with a minimum of 4 inches of sand. Areas where floor wetness would be undesirable should be underlaid with a vapor retarder (i.e. visqueen or other material recommended by the Project Engineer or Architect) to reduce moisture transmission from the subgrade soils to the slab. The retarder should be placed as specified by the structural designer.
- e. Slabs should, at a minimum, be reinforced at mid-slab with No. 3 bars on 24-inch centers, each way. No. 3 bars acting as dowels should also extend out of the perimeter footings, and should be bent so that they extend a minimum of 3 feet into adjacent slabs. (Please note that these recommendations exceed the minimum requirements of Table 18-I-D.)
- f. Soils underlying slabs that are in the "low" expansion range should be premoistened to 120 percent of optimum moisture content to a depth of 21 inches below lowest adjacent grade. Premoistening of slab areas should be observed and tested by this firm for compliance with these recommendations prior to placing of sand, reinforcing steel, or concrete.

3. Mat Foundations

As an alternative to the geogrid-reinforced subgrade/conventional foundation system, a structural mat slab may be used to minimize the propagation of liquefaction-induced effects to the proposed buildings and to minimize differential settlements.

- a. The mat foundation may be a conventionally reinforced slab system designed for the anticipated differential settlements.
- b. The mat foundation for the proposed buildings should be supported by a minimum 4-foot thickness of compacted reinforced soil prepared as recommended in Section A of this report.
- c. To limit the maximum total settlement under static conditions to about 1 inch, an allowable "net" bearing capacity of 400 pounds per square foot (psf), for loads distributed over the full footprint of the mat foundations, may be utilized for dead and sustained live loads for design of the mat foundation. An

allowable “net” bearing capacity of 2,000 psf may be used for thickened edges or other concentrated load areas. These values include a safety factor of at least 3.0 may be increased by one-third when considering transient loads such as earthquake or wind forces.

- d. For preliminary mat foundation analysis, an average modulus of subgrade reaction (“ k_p ” value) of 70 pounds per cubic inch (pci) may be used for static conditions provided the foundation subgrade is prepared as recommended in Section A of this report. The final modulus value should be based on stress settlement calculations and iterations between the Project Structural Engineer and Geotechnical Engineer.
- e. The actual depth, width, and reinforcement requirements for the mat foundation should be specified by the Project Structural Engineer.
- f. The structural engineer should account for the estimated static and seismically-induced settlements (total and differential) in the mat foundation design.

4. Frictional and Lateral Coefficients

- a. Resistance to lateral loading may be provided by friction acting on the base of foundations. For foundations supported in compacted engineered fill, a coefficient of friction of 0.62 may be applied to dead load forces. This value does not include a factor of safety.
- b. For foundations supported in compacted engineered fill, passive resistance acting on the sides of foundation stems equal to 350 pcf of equivalent fluid weight may be included for resistance to lateral load. This value does not include a factor of safety.
- c. A minimum factor of safety of 1.5 should be used when designing for sliding or overturning.
- d. For the foundations, passive resistance may be combined with frictional resistance provided that a one-third reduction in the coefficient of friction is used.

5. Settlement Considerations

- a. In the event of a strong seismic event, the soils underlying the site could undergo a combination of liquefaction and dry sand settlements depending upon the depth to the groundwater table. Because both are the result of earthquake-induced vibrations, the settlements from both phenomena are

additive. The worst-case scenario for these issues has been determined to be situated near the northwestern area of the campus, and for 3.4 inches of total settlement and 1.7 inches of differential settlement. The other areas of the campus are estimated to potentially be subject to between 0.6 and 1.5 inches of total settlement, and 0.3 to 0.8 inches of differential settlement.

- b. Maximum total static settlements of about an inch are anticipated for foundations and floor slabs designed as recommended. Differential settlement between adjacent load bearing members should be less than one-half the total settlement.
- c. The use of the recommended geogrid reinforced pad and stiffened conventional foundation system, or the structural mat slab solution, beneath the proposed structures will help to reduce the differential settlements, but it will not eliminate or completely mitigate them.

6. Drilled Pier Foundations

Drilled piers may be used for axial and lateral support of flagpoles, parking lot light poles, building canopies, and partition walls. Piers may consist of drilled, reinforced cast-in-place concrete caissons (cast-in-drilled-hole "CIDH" piles). Piers may be drilled or hand-dug. Steel reinforcing may consist of "rebar cages" or structural steel sections. The drilled pier recommendations provided below do not apply to foundations for typical chain-linked fence posts.

- a. As a minimum, the new piers should be at least eighteen inches (18") in diameter and embedded a minimum of 10 feet into native soils. The geotechnical engineer should be consulted during pier installation to determine compliance with the geotechnical recommendations.
- b. For vertical capacity, the piers may be proportioned using an allowable skin friction (adhesion) value of 100 pounds per square foot (psf) in firm, native soil. For any portion of the pier in compacted engineered fill, an allowable skin friction (adhesion) value of 125 psf may be used.
- c. The load capacities given above should be based upon skin friction with no end bearing. These allowable capacities include a safety factor of 2.0 and may be increased by one-third when considering transient loads such as wind or seismic forces.
- d. Due to disturbance in the upper 2 to 3 feet by farming activities at the site, the allowable skin friction for any drilled pier located outside the limits of the

recommended remedial excavations should start at a depth of 3 feet below the top of the pier.

- d. Reduction in axial capacity due to group effects should be considered for piers spaced at 3 diameters on-center or closer.
- e. This allowable skin friction value is based upon available subsurface field data and on Earth Systems' experience on similar projects. The compressive and tensile strength of new pier designs should be checked to verify the structural capacity of the piers. Reinforcement of piers should be specified by the structural engineer. The specific method of pier installation will affect the performance of the piers. Earth Systems recommends a meeting with the design team and contractor to verify that the specific method of pier installation can provide the anticipated load supporting capacity.
- f. Lateral (horizontal) loads may be resisted by passive resistance of soil against the piers. An equivalent fluid weight (EFW) of 200 psf per foot of penetration in firm, native soil may be used for lateral load design. For any portion of pier in compacted engineered fill, an equivalent fluid weight (EFW) of 350 psf per foot of penetration may be used. These resisting pressures are ultimate values. The maximum passive pressure used for design should not exceed 2,500 psf.
- g. For piers spaced at least three diameters apart, an effective width of three times the actual pier diameter may be used for passive pressure calculations.
- h. Assuming 18-inch diameter piers of reinforced concrete that are fixed against rotation at the head, the "point of fixity" was estimated to be located at least 7.5 feet below the final ground elevation based on commonly accepted engineering procedures (Lee, 1968).
- i. It is the structural engineer's responsibility to design the reinforcement for the piers to sustain the imposed axial and lateral loading.

7. Preliminary Asphalt Paving Sections

- a. Based on an assumed load of ten 3-axle buses per day (i.e. five in the morning and five at the end of the school day) running through the bus drop-off area, a Traffic Index of 6.1 has been determined for a 20-year design life. For the areas subjected to bus traffic, and using a measured R-Value of 15, paving sections should have a minimum gravel equivalent of 1.65 feet. This can be achieved by using 4 inches of asphaltic concrete on 10 inches of Class II Base or

Processed Miscellaneous Base (PMB) compacted to a minimum of 95 percent of maximum dry density on subgrade soils compacted to a minimum of 95 percent of maximum dry density.

- b. Assuming a Traffic Index of 5 for areas within the parking lot that will only be subjected to automobile traffic, and will not be subjected to bus traffic, and using the measured R-Value of 15, paving sections should have a minimum gravel equivalent of 1.36 feet. This can be achieved by using 3 inches of asphaltic concrete on 8 inches of Class II Base or PMB compacted to a minimum of 95 percent of maximum dry density on subgrade soils compacted to a minimum of 95 percent of maximum dry density.
- c. The preliminary paving sections provided above have been designed for the type of traffic indicated. If there are other loads that could increase the Traffic Indices above those assumed above, re-evaluation of these sections should be performed.

8. Preliminary Concrete Paving Sections

- a. For those areas that will be within the bus drop-off loop, and will be paved with concrete, we have assumed a daily traffic over the surface of ten 3-axle buses per day (five in the morning and five at the end of the school day), and a design life of 20 years. We also have used the lower of the two measured R-Values (15), which is approximately equivalent to a coefficient of subgrade reaction of $k=120$ pounds per cubic inch. Based on these values and design methods described by the American Concrete Institute (ACI 330R-87), the following minimum unreinforced paving section was determined:

1. Concrete thickness = 6.0 inches
2. PMB thickness under concrete = 4.0 inches
3. Compressive strength of concrete, f_c = 4,000 psi at 28 days
4. Modulus of flexural strength of 3,500 psi concrete = 580 psi
5. Maximum spacing of contraction joints, each way = 15 feet

- b. For those areas that will not be subjected to bus traffic, and will be paved with concrete, we have assumed car traffic only, a design life of 20 years, and an measured R-Value of 15. Based on these values, the following minimum unreinforced paving section was determined:

1. Concrete thickness = 4.5 inches
 2. PMB thickness under concrete = 4.0 inches
 3. Compressive strength of concrete, f_c = 3500 psi at 28 days
 4. Modulus of flexural strength of 3500 psi concrete = 530 psi
 5. Maximum spacing of contraction joints, each way = 11 feet
- c. If additional resistance to cracking is desired beyond that provided by the contraction joints, steel reinforcement can be added to the pavement section at approximately two inches below the top of concrete; however, reinforcement is not required.
- d. The preliminary paving sections discussed above have been designed for the type of traffic indicated. If the pavement is placed before construction on the project is complete, construction loads should be taken into account. If bus traffic is expected to exceed two per day, these sections should be re-evaluated. Traffic should not be allowed on the pavement until 28 days after concrete placement, or until the 28-day design compressive strength is achieved.

ADDITIONAL SERVICES

This report is based on the assumption that an adequate program of monitoring and testing will be performed by Earth Systems Southern California during construction to check compliance with the recommendations given in this report. The recommended tests and observations include, but are not necessarily limited to the following:

1. Review of the building and grading plans during the design phase of the project.
2. Observation and testing during site preparation, grading, placing of engineered fill, and foundation construction.
3. Consultation as required during construction.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The analysis and recommendations submitted in this report are based in part upon the data obtained from the borings and cone penetration test soundings advanced on the site. The

nature and extent of variations between and beyond the borings and CPTs may not become evident until construction. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report.

The scope of services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater or air, on, below, or around this site. Any statements in this report or on the soil boring logs regarding odors noted, unusual or suspicious items or conditions observed, are strictly for the information of the client.

Findings of this report are valid as of this date; however, changes in conditions of a property can occur with passage of time whether they be due to natural processes or works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur whether they result from legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside the control of this firm. Therefore, this report is subject to review and should not be relied upon after a period of one year.

In the event that any changes in the nature, design, or location of the improvements are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

This report is issued with the understanding that it is the responsibility of the Owner, or of his representative to ensure that the information and recommendations contained herein are called to the attention of the Architect and Engineers for the project and incorporated into the plan and that the necessary steps are taken to see that the Contractor and Subcontractors carry out such recommendations in the field.

As the Geotechnical Engineers for this project, Earth Systems Southern California has striven to provide services in accordance with generally accepted geotechnical engineering practices in this community at this time. No warranty or guarantee is expressed or implied. This report was prepared for the exclusive use of the Client for the purposes stated in this document for the referenced project only. No third party may use or rely on this report without express written authorization from Earth Systems Southern California for such use or reliance.

It is recommended that Earth Systems Southern California be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications. If Earth Systems Southern California is not accorded the privilege of making this recommended review, it can assume no responsibility for misinterpretation of the recommendations.

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APPENDIX A

Vicinity Map

Regional Fault Map

Regional Geologic Map

Seismic Hazard Zones Map

FEMA Flood Insurance Rate Map

Historical High Groundwater Map

Field Study

Site Geologic Map

Geologic Cross-Section A-A'

Geologic Cross-Section B-B'

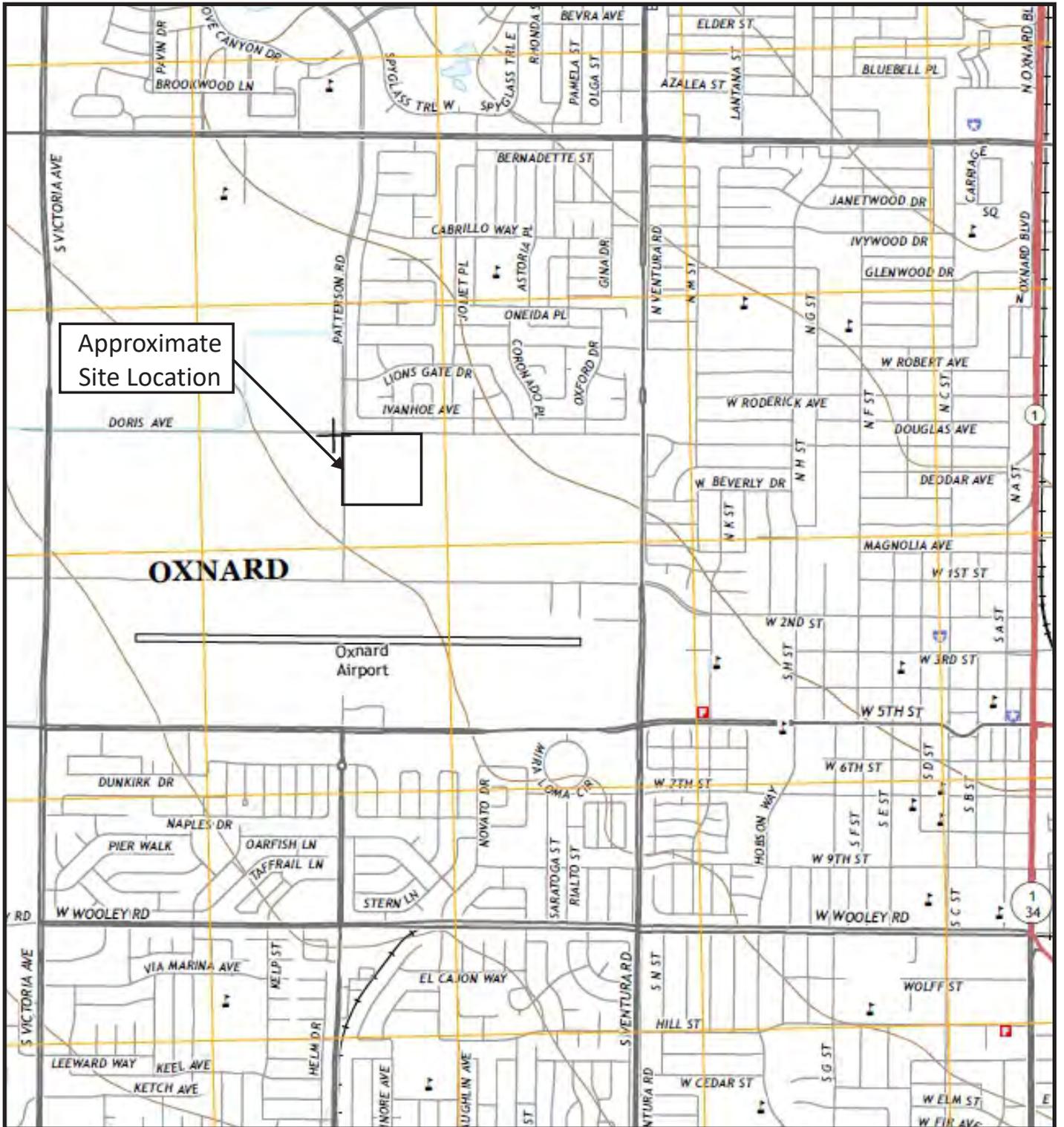
Logs and Interpretations of CPT Sounding

Logs of Koury Borings

Logs of Earth Systems Borings

Boring Log Symbols

Unified Soil Classification System



*Taken from USGS Topo Map, Oxnard Quadrangle, 2015.

Approximate Scale: 1" = 2,000'

0 2,000' 4,000'



VICINITY MAP

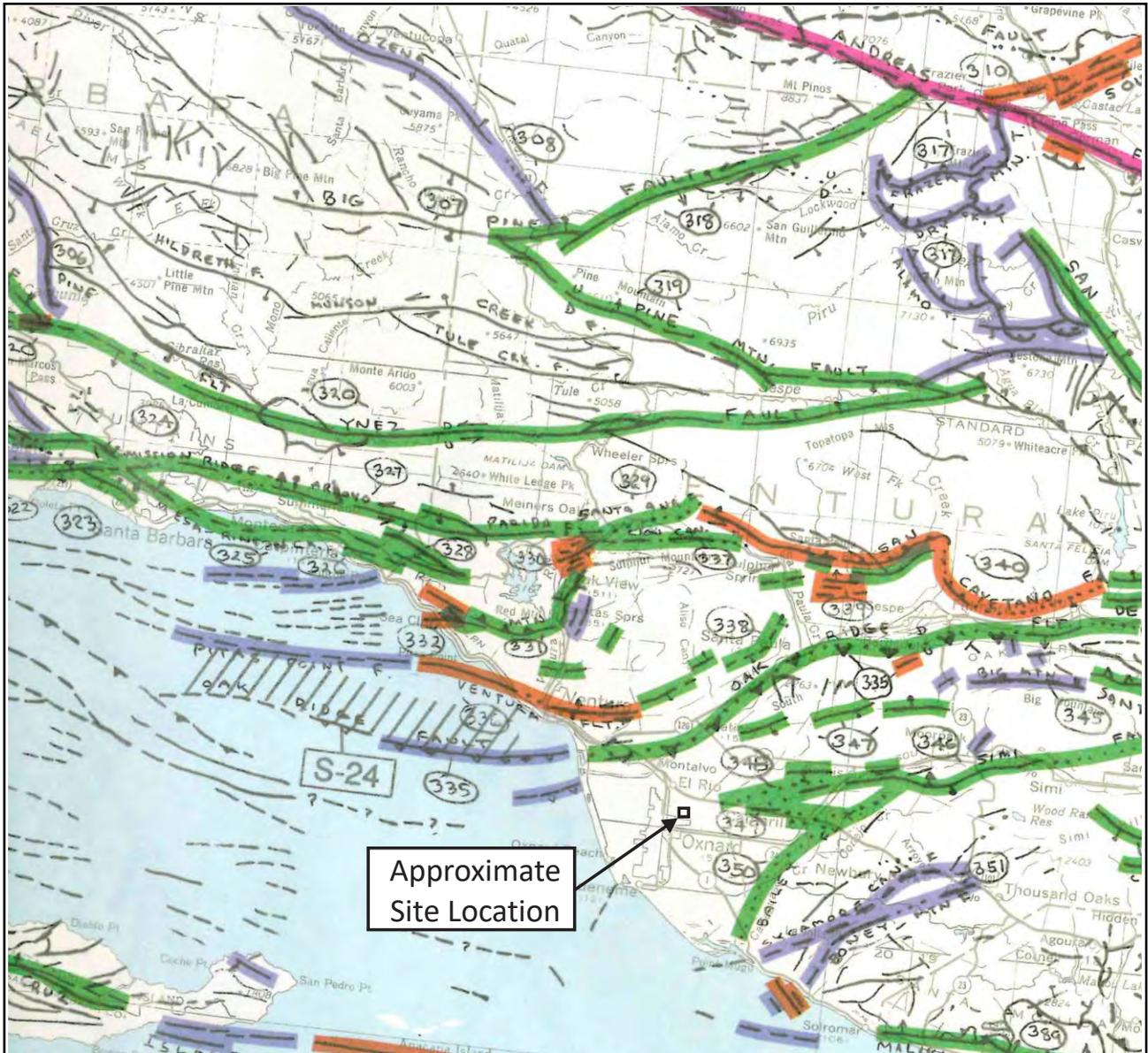
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Southern California

September 2017

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*Taken from DMG OFR 92-03, Fault Activity Map of California, 1992

REGIONAL FAULT MAP

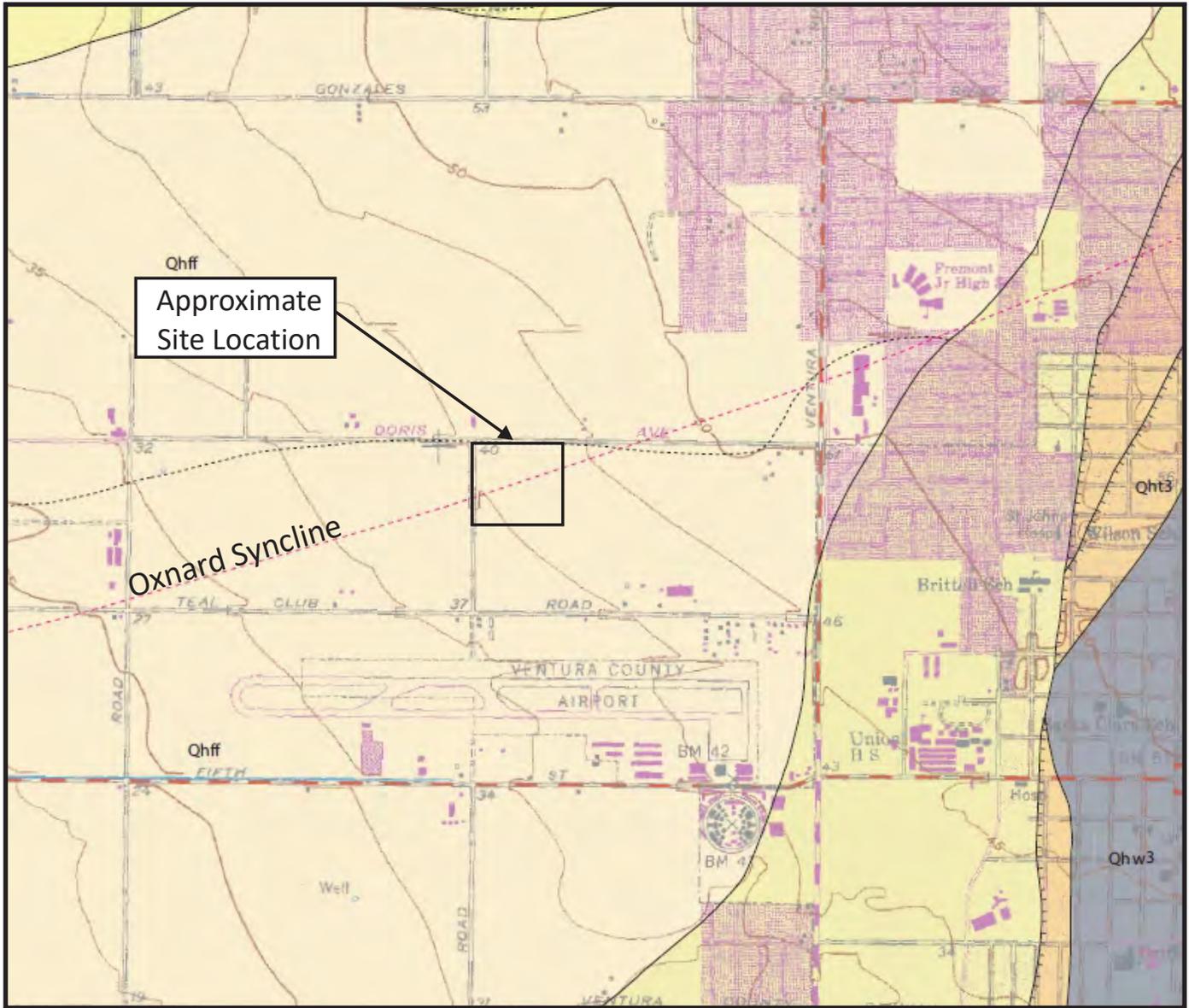
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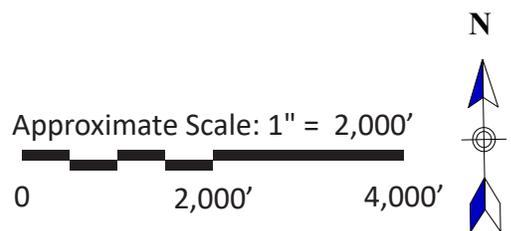
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*Taken from USGS, SCAMP Geologic Map of the Oxnard 7.5' Quadrangle, California, 2004.

- Qoa** Alluvial deposits (early to middle Pleistocene) - Moderately to deeply dissected, undifferentiated alluvial deposits where topography often consists of gently rolling hills with little or none of the original planar surface preserved, or tilted surfaces along active range fronts, composed of moderately to poorly sorted and bedded gravel, sand, silt, and clay.
- Qhf** Alluvial fan deposits (Holocene) - Deposited by streams emanating from mountain canyons onto alluvial valley floors, deposits originate as debris flows, hyperconcentrated mudflows, or braided stream flows; composed of moderately to poorly sorted, and moderately to poorly bedded, sandy clay with some gravel.
- Qhff** Holocene alluvial fan deposits, fine facies; fine-grained alluvial fan and flood plain overbank deposits on very gently sloping portions of the valley floor; composed of predominantly clay with interbedded lenses of coarser alluvium (sand and occasional gravel).



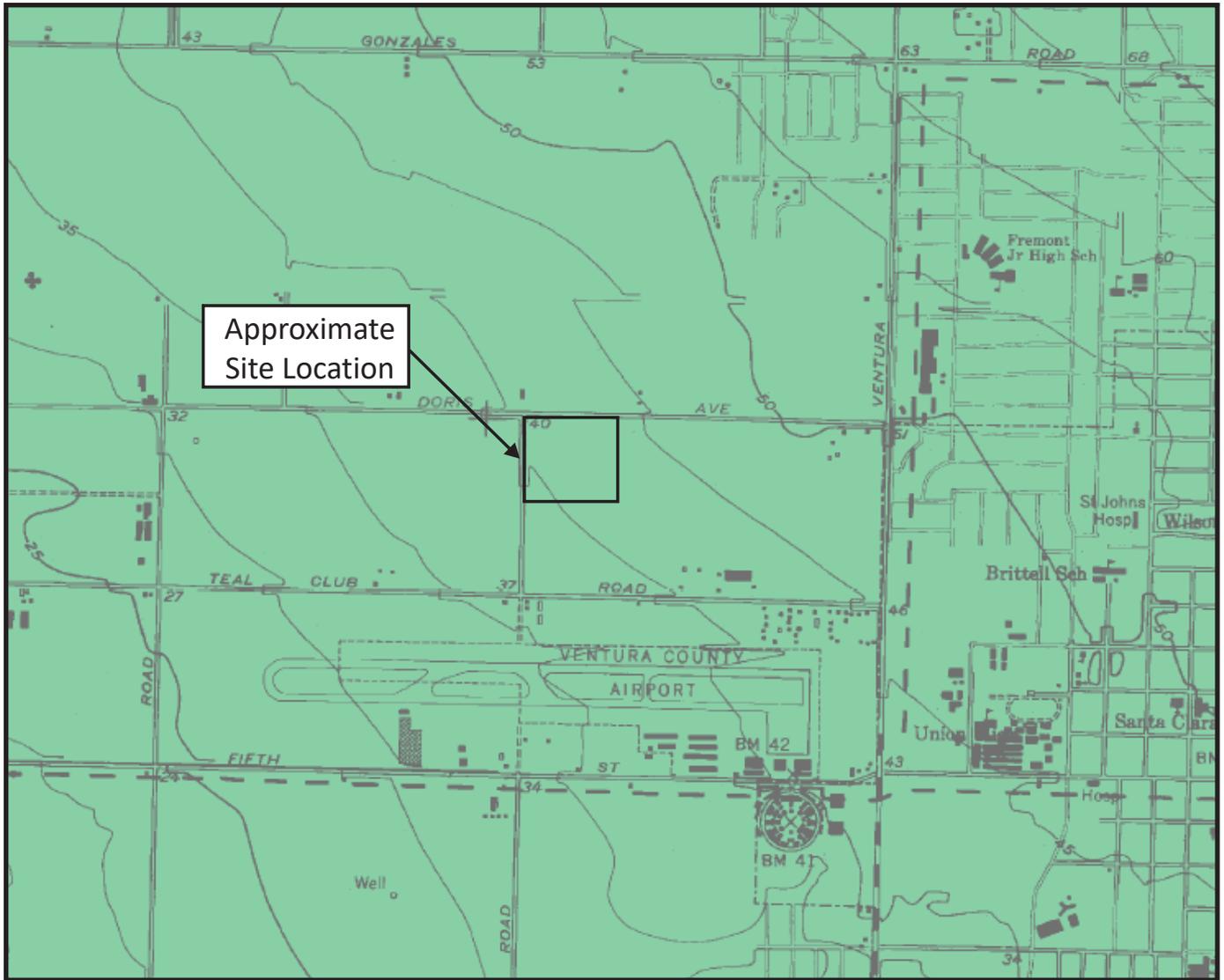
- Contact between map units - Solid where accurately located, dotted where concealed.
- Contact between similar map units of different relative age - Generally approximately located.
- ? Fault - Approximately located or inferred, dotted where concealed, queried where location is uncertain.
- ? Axis of anticline - Solid where accurately located, dashed where approximately located, dotted where concealed, queried where location is uncertain; arrow indicates direction of plunge.
- ? Axis of syncline - Solid where accurately located, dotted where concealed, queried where location is uncertain; arrow indicates direction of plunge.

REGIONAL GEOLOGIC MAP

Doris and Patterson Middle School
Oxnard, California

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Southern California**

September 2017 VT-24687-10



**STATE OF CALIFORNIA
SEISMIC HAZARD ZONES**

Delineated in compliance with
Chapter 7.8, Division 2 of the California Public Resources Code
(Seismic Hazards Mapping Act)

OXNARD QUADRANGLE

REVISED OFFICIAL MAP

Released: December 20, 2002

Janet Davis
STATE GEOLOGIST

Approximate Scale: 1" = 2,000'



Liquefaction



Areas where historical occurrence of liquefaction, or local geological, geotechnical and ground-water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslides



Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

SEISMIC HAZARD ZONES MAP

Doris and Patterson Middle School
Oxnard, California



**Earth Systems
Southern California**

September 2017

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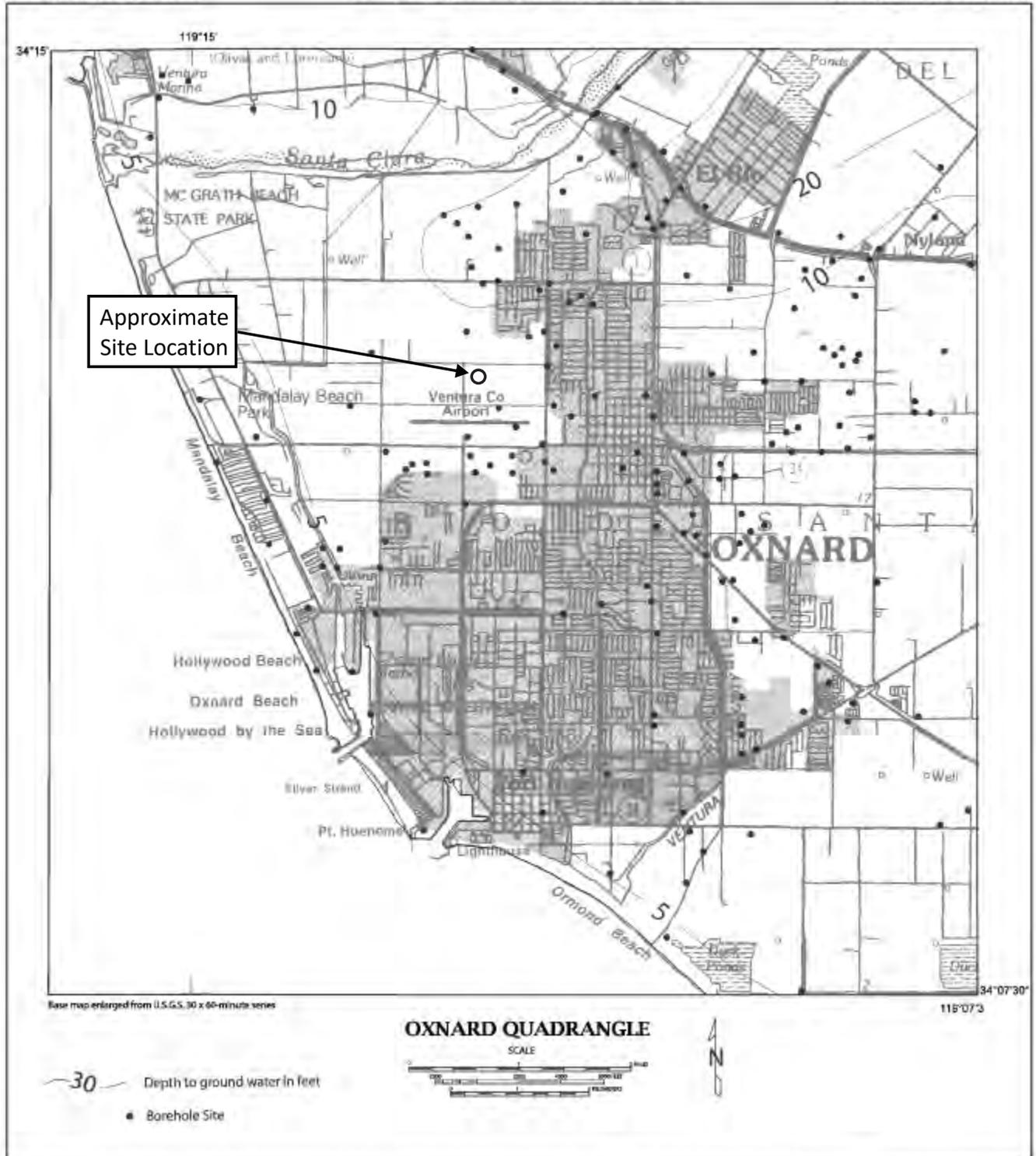


Plate 1.2 Depth to historically highest groundwater and borehole locations, Oxnard 7.5-minute quadrangle, California

HISTORICAL HIGH GROUNDWATER MAP

Doris and Patterson Middle School
Oxnard, California



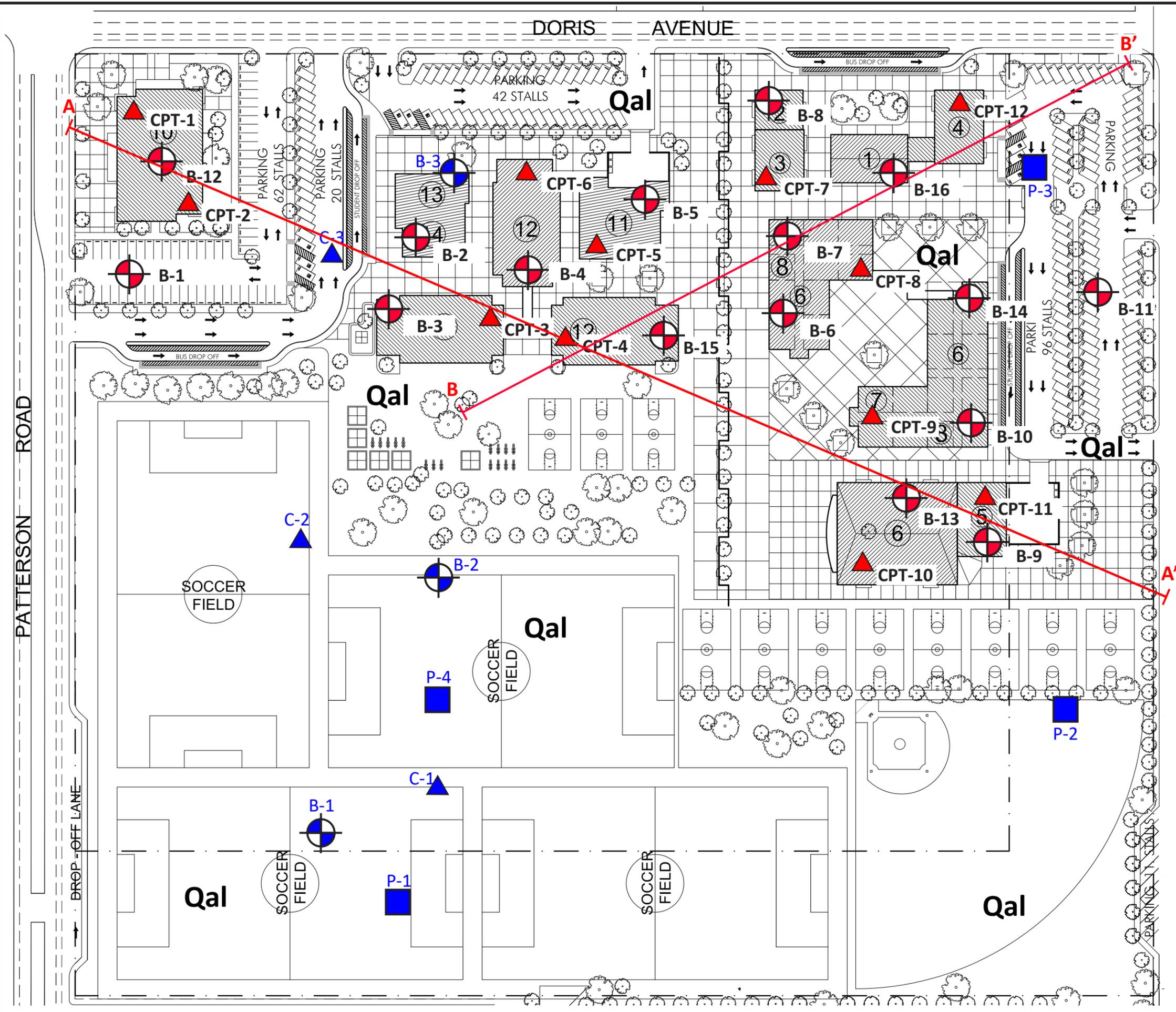
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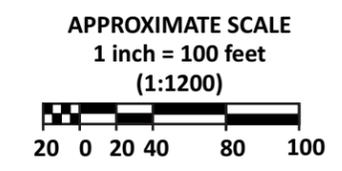
FIELD STUDY

- A. On August 28, 2017, twelve Cone Penetrometer Test (CPT) soundings were advanced to depths ranging from 15 to 65 feet to obtain information pertaining to the soil profile. The CPT soundings were performed by equipment owned and operated by Kehoe Testing and Engineering. During advancement of the cone penetrometer, readings of sleeve friction (in tons per square foot), tip resistance (also in tons per square foot), and friction ratio (in percent) were recorded at 0.15-meter intervals as per ASTM D 5778 and ASTM D 3441.
- B. Between August 15 and 28, 2017, sixteen borings were drilled to depths ranging from 6.5 to 66.5 feet below the existing ground surface to observe the soil profile and to obtain samples for laboratory analysis. The borings with depths less than 25 feet were drilled using a hollow stem 6-inch diameter continuous flight auger. The deeper borings were drilled using a 4-inch diameter mud rotary system. Both types of borings were drilled using a Mobile Drill B-61 truck mounted drilling rig.
- C. Samples were obtained within the test borings with a Modified California (M.C.) ring sampler (ASTM D 3550 with shoe similar to ASTM D 1586), and with a Standard Penetration Test (SPT) sampler (ASTM D 1586). The M.C. sampler has a 3-inch outside diameter, and a 2.42-inch inside diameter when used with brass ring liners (as it was during this study). The SPT sampler has a 2.00-inch outside diameter and a 1.37-inch inside diameter, but when used without liners, as was done for this project, the inside diameter is 1.63 inches. The samples were obtained from the borings by driving the sampler with a 140-pound automatic trip hammer dropping 30 inches in accordance with ASTM D 1586.
- D. Bulk samples of the soils encountered were gathered from the cuttings.
- E. The final logs of the borings represent interpretations of the contents of the field logs and the results of laboratory testing performed on the samples obtained during the subsurface study. The final logs, as well as the logs and interpretations of the CPT soundings, are included in this Appendix. The approximate locations of the borings and the CPT soundings were determined in the field by pacing and sighting, and are shown on the Site Plan in this Appendix.



Legend

- : ESSC Borings
- : ESSC CPT Soundings
- : Koury Borings
- : Koury CPT Soundings
- : Koury Percolation Tests
- Qal**: Alluvium
- : Lines of Cross-Sections



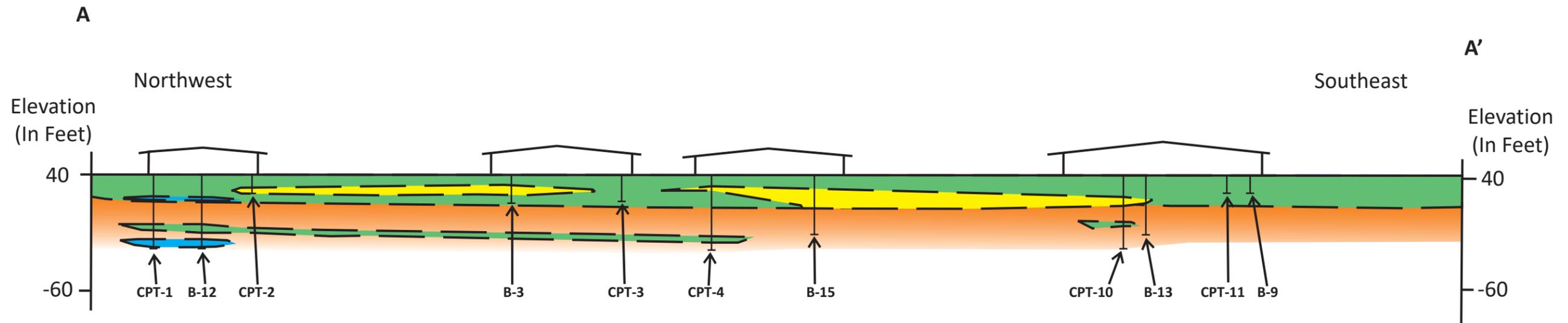
SITE GEOLOGIC MAP

Doris & Patterson School
Oxnard, California

September 2017

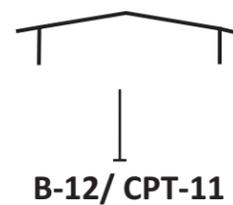
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Geologic Cross-section Along A-A'



Legend

-  Predominantly Silt (ML)
-  Silty Sand and Sandy Silts (SM/ML)
-  Clay Horizons (CL)
-  Sands (SM + SP)



Proposed Building
Location of CPT/Boring

SCALE
1 in = 100 ft

GEOLOGIC CROSS-SECTION A-A'

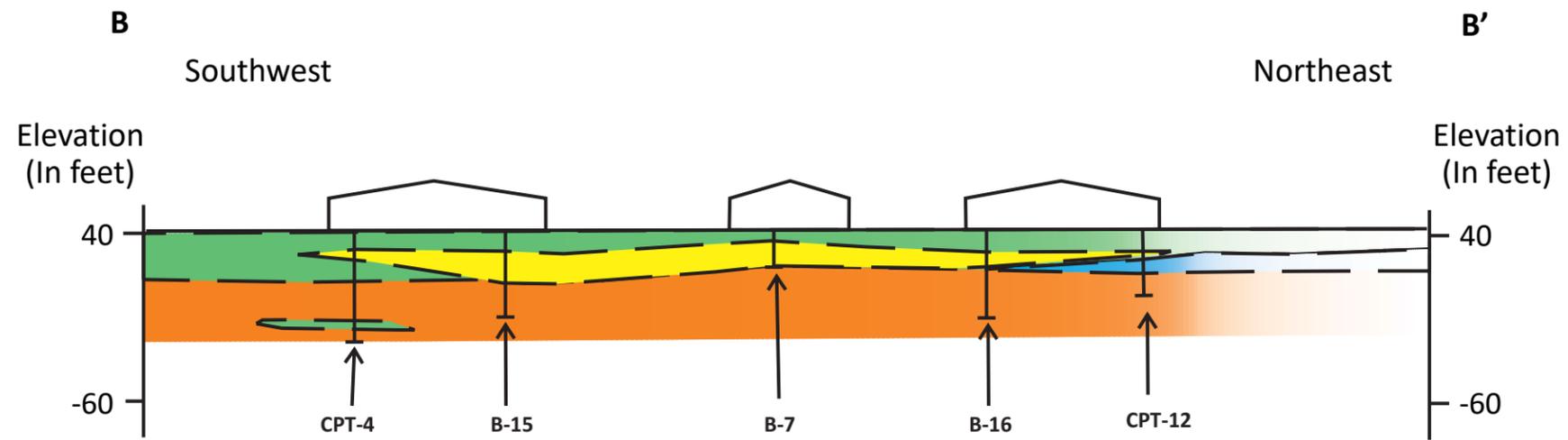
Doris & Patterson
Oxnard California



September 2017

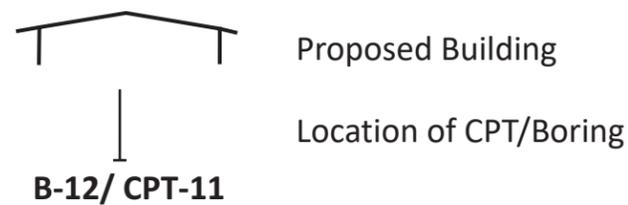
VT-24867-10

Geologic Cross-section Along B-B'



Legend

-  Predominantly Silt (ML)
-  Silty Sand and Sandy Silts (SM/ML)
-  Clay Horizons (CL)
-  Sands (SM + SP)



SCALE
1 in = 100 ft

GEOLOGIC CROSS-SECTION B-B'

Doris & Patterson
Oxnard, California



September 2017

VT-24867-10



CPT No : CPT-1

Cone Penetrometer: Kehoe Testing and Engineering

Project Name: Doris and Patterson

Truck Mounted Electric Cone

Project No.: VT-24867-10

with 23-ton reaction weight

Location: See Site Exploration Plan

Date: 8/28/2017

DEPTH (FEET)

Interpreted Soil Stratigraphy

Friction Ratio (%)

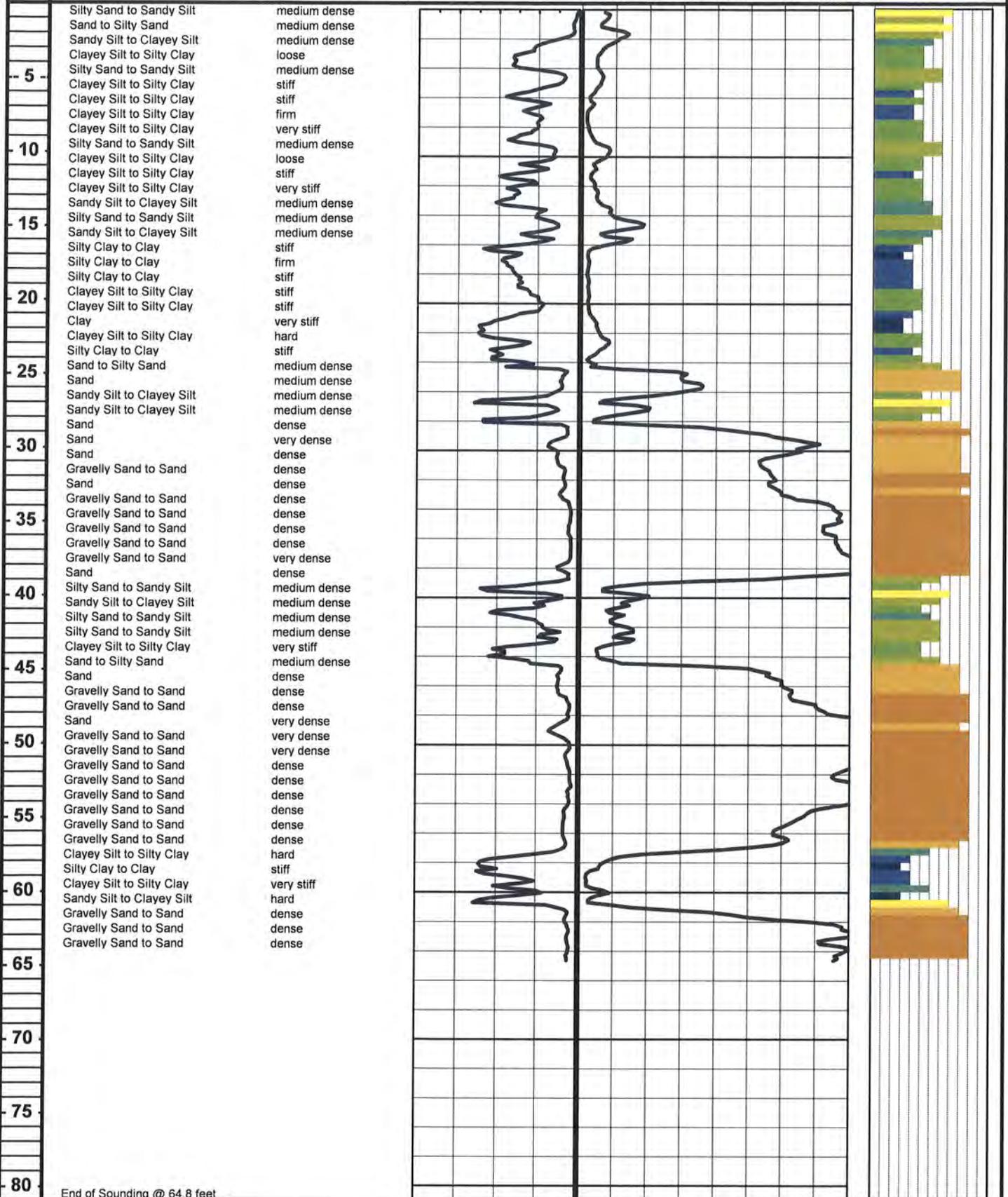
Tip Resistance, Qc (tsf)

Graphic Log (SBT)

Robertson & Campanella ('89) Density/Consistency 8

6 4 2 0 50 100 150 200 250 300 350 400 0

12



End of Sounding @ 64.8 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-1		Plot: 1		Density: 1		SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest														
Est. GWT (feet): 14.0				Dr correlation: 0		Baldi		Qc/N: 0		Jefferies & Davies					Phi Correlation: 4					SPT N		
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1n	2.5 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dens Dr (%)	Phi (deg.)	Nk Su (tsf)	OCR
0.15	0.5	38.17	0.17	Sand to Silty Sand	SP/SM	medium dense	100	5.6	7	0.013	0.013	0.17	0.53	1.70	61.3	1.74	61.3	12	12	57	31	
0.30	1.0	28.50	0.29	Silty Sand to Sandy Silt	SM/ML	loose	110	5.2	5	0.039	0.039	0.29	0.59	1.70	45.8	1.94	45.8	9	9	44	30	
0.46	1.5	56.80	0.29	Sand to Silty Sand	SP/SM	medium dense	100	5.7	10	0.065	0.065	0.29	0.51	1.70	91.3	1.66	91.3	17	18	73	32	
0.61	2.0	55.97	0.95	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	11	0.091	0.091	0.96	0.58	1.70	89.9	1.93	109.9	18	22	72	33	
0.76	2.5	36.83	2.07	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	8	0.119	0.119	2.08	0.70	1.70	59.2	2.29	113.5	14	23	55	31	
0.91	3.0	26.07	2.76	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.1	6	0.146	0.146	2.78	0.75	1.70	41.9	2.49	113.1	11	23	41	30	
1.07	3.5	21.73	3.24	Clayey Silt to Silty Clay	ML/CL	loose	110	3.9	6	0.174	0.174	3.26	0.79	1.70	34.9	2.59	114.5	9	23	33	30	
1.22	4.0	22.90	2.81	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	6	0.201	0.201	2.83	0.77	1.70	36.8	2.53	108.4	10	22	35	30	
1.37	4.5	29.37	0.87	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	6	0.229	0.229	0.88	0.65	1.70	47.2	2.14	72.3	10	14	46	30	
1.52	5.0	27.70	0.89	Silty Sand to Sandy Silt	SM/ML	loose	110	4.8	6	0.256	0.256	0.90	0.66	1.70	44.5	2.17	70.8	10	14	43	30	
1.68	5.5	19.05	2.35	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	5	0.284	0.284	2.38	0.77	1.70	30.6	2.55	92.4	8	18	28	29	
1.83	6.0	11.90	2.94	Silty Clay to Clay	CL	stiff	110	3.8	3	0.311	0.311	3.02	0.84	1.70	19.1	2.77		3			0.68	11.2
1.98	6.5	14.53	1.93	Clayey Silt to Silty Clay	ML/CL	loose	110	3.9	4	0.339	0.339	1.97	0.79	1.70	23.4	2.59	76.4	6	15	16	29	
2.13	7.0	7.60	2.39	Silty Clay to Clay	CL	firm	110	3.4	2	0.366	0.366	2.52	0.88	1.70	12.2	2.88		2			0.43	5.9
2.29	7.5	7.27	1.97	Silty Clay to Clay	CL	firm	110	3.4	2	0.394	0.394	2.08	0.87	1.70	11.7	2.85		2			0.40	5.2
2.44	8.0	9.57	2.12	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.6	3	0.421	0.421	2.22	0.84	1.70	15.4	2.77		3			0.54	6.5
2.59	8.5	13.37	2.86	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.7	4	0.449	0.449	2.96	0.83	1.70	21.5	2.73		4			0.76	8.6
2.74	9.0	22.07	2.83	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	6	0.476	0.476	2.89	0.78	1.70	35.5	2.55	108.0	8	22	34	29	
2.90	9.5	40.20	1.22	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	8	0.504	0.504	1.24	0.65	1.62	61.5	2.13	93.3	12	19	57	31	
3.05	10.0	34.20	1.26	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	7	0.531	0.531	1.28	0.67	1.59	51.3	2.20	86.1	10	17	49	30	
3.20	10.5	19.00	2.33	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	5	0.559	0.559	2.40	0.78	1.64	29.5	2.56	91.4	6	18	26	29	
3.35	11.0	17.27	2.32	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.9	4	0.588	0.588	2.40	0.79	1.59	26.0	2.60		4			0.98	8.5
3.51	11.5	14.20	3.24	Silty Clay to Clay	CL	stiff	120	3.6	4	0.618	0.618	3.39	0.84	1.57	21.1	2.77		4			0.80	6.6
3.66	12.0	18.97	2.92	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	5	0.648	0.648	3.02	0.81	1.49	26.7	2.66		5			1.08	8.5
3.81	12.5	22.93	3.10	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.9	6	0.678	0.678	3.19	0.80	1.43	30.9	2.63		6			1.31	9.9
3.96	13.0	23.90	3.76	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	6	0.708	0.708	3.88	0.81	1.39	31.3	2.68		6			1.36	9.8
4.11	13.5	38.17	2.62	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	9	0.738	0.738	2.67	0.74	1.31	47.1	2.44	116.4	11	23	46	30	
4.27	14.0	44.43	2.05	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	10	0.768	0.768	2.09	0.71	1.26	52.7	2.33	107.9	11	22	50	30	
4.42	14.5	78.67	1.33	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.0	16	0.798	0.798	1.34	0.62	1.21	89.6	2.03	120.2	18	24	72	33	
4.57	15.0	64.47	1.44	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	13	0.828	0.796	1.46	0.65	1.20	73.2	2.12	109.2	15	22	64	32	
4.72	15.5	45.83	2.15	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	10	0.858	0.811	2.19	0.71	1.21	52.4	2.35	110.2	12	22	50	31	
4.88	16.0	38.95	3.14	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	10	0.888	0.825	3.21	0.76	1.21	44.5	2.51	125.4	10	25	43	30	
5.03	16.5	9.53	3.44	Silty Clay to Clay	CL	stiff	120	3.1	3	0.918	0.840	3.80	0.92	1.24	11.2	3.02		3			0.51	3.1
5.18	17.0	10.67	3.72	Clay	CL/CH	stiff	120	3.1	3	0.948	0.854	4.08	0.92	1.22	12.3	3.00		3			0.58	3.4
5.33	17.5	9.70	3.40	Silty Clay to Clay	CL	stiff	120	3.1	3	0.978	0.868	3.78	0.92	1.20	11.0	3.02		3			0.52	3.0
5.49	18.0	8.93	3.07	Silty Clay to Clay	CL	firm	120	3.1	3	1.008	0.883	3.46	0.93	1.18	10.0	3.03		3			0.47	2.7
5.64	18.5	10.57	2.94	Silty Clay to Clay	CL	stiff	120	3.2	3	1.038	0.897	3.26	0.91	1.16	11.6	2.96		3			0.57	3.2
5.79	19.0	10.17	2.67	Silty Clay to Clay	CL	stiff	120	3.2	3	1.068	0.912	2.98	0.91	1.14	11.0	2.96		3			0.54	3.0
5.94	19.5	10.83	2.12	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.3	3	1.098	0.926	2.38	0.88	1.13	11.5	2.89		3			0.58	3.2
6.10	20.0	10.27	1.82	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.4	3	1.128	0.940	2.05	0.88	1.11	10.8	2.88		3			0.55	2.9
6.25	20.5	11.60	2.28	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.3	3	1.158	0.955	2.53	0.88	1.10	12.0	2.89		3			0.63	3.3
6.40	21.0	17.60	3.70	Silty Clay to Clay	CL	stiff	120	3.4	5	1.188	0.969	3.97	0.87	1.08	18.0	2.87		5			0.98	5.1
6.55	21.5	22.87	4.75	Clay	CL/CH	very stiff	120	3.4	7	1.218	0.984	5.02	0.87	1.07	23.0	2.85		7			1.29	6.6
6.71	22.0	26.87	4.86	Clay	CL/CH	very stiff	120	3.5	8	1.248	0.998	5.10	0.85	1.05	26.7	2.81		8			1.52	7.7
6.86	22.5	37.90	3.32	Clayey Silt to Silty Clay	ML/CL	loose	120	3.9	10	1.278	1.012	3.43	0.79	1.04	37.1	2.59	120.6	10	24	36	30	
7.01	23.0	33.33	3.56	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	9	1.308	1.027	3.71	0.81	1.02	32.3	2.65		9			1.90	9.4
7.16	23.5	18.90	4.05	Silty Clay to Clay	CL	very stiff	120	3.3	6	1.338	1.041	4.36	0.88	1.01	18.1	2.89		6			1.05	5.1
7.32	24.0	14.47	3.10	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.3	4	1.368	1.056	3.42	0.89	1.00	13.7	2.92		4			0.79	3.7
7.47	24.5	72.37	1.70	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	15	1.398	1.070	1.74	0.67	0.99	67.9	2.19	112.2	15	22	61	32	
7.62	25.0	150.70	0.73	Sand	SP	medium dense	120	5.6	27	1.428	1.084	0.74	0.52	0.99	140.6	1.71	147.1	26	29	91	35	
7.77	25.5	168.87	0.82	Sand	SP	medium dense	120	5.7	30	1.458	1.099	0.83	0.52	0.98	156.3	1.71	163.2	28	33	95	36	
7.92	26.0	156.30	1.02	Sand	SP	medium dense	120	5.5	29	1.488	1.113	1.03	0.55	0.97	143.7	1.80	159.0	27	32	92	35	
8.08	26.5	58.38	3.50	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	14	1.518	1.128	3.59	0.76	0.95	52.6	2.49	143.5	13	29	50	31	
8.23	27.0	94.10	1.19	Sand to Silty Sand	SP/SM	medium dense	120	5.0	19	1.548	1.142	1.21	0.61	0.95	84.9	2.02	112.4	17	22	70	32	
8.38	27.5	55.40	1.80	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.5	12	1.578	1.156	1.85	0.71	0.94	49.2	2.32	98.8	12	20	47	31	
8.53	28.0	40.90	3.43	Clayey Silt to Silty Clay	ML/CL	hard	120	3.9	11	1.608	1.171	3.57	0.79	0.92	35.7	2.61		11			2.34	10.1
8.69	28.5	210.63	0.51	Sand	SP	dense	120	6.0	35	1.638	1.185	0.51	0.50	0.94	188.1	1.52	188.1	32	38	100	37	
8.84	29.0	291.17	0.68	Gravelly Sand to Sand	SW	dense	120	6.1	48	1.668	1.200	0.68	0.50	0.94	258.5	1.49	258.5	44	52	100	39	
8.99	29.5	341.30	1.39	Sand	SP	very dense	120	5.7	60	1.698	1.214	1.39	0.51	0.93	300.6	1.69	309.3	54	62	100	41	
9.14	30.0	320.00	1.08	Sand	SP	dense	120	5.8	55	1.728	1.228	1.08	0.50	0.93	280.7	1.62	280.7	50	56	100	40	
9.30	30.5</																					



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-1				Plot: 1		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest										Nk: 17				
Est. GWT (feet): 14.0				Dr correlation: 0		Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4				SPT N				
Base Depth meters	Base Depth feet	Avg Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o	F	r	Cq	Norm. Qc1n	lc	Clean Sand N _{100s}	Clean Sand N _{100s}	Rel. Dens Dr (%)	Phi (deg.)	Su (tsf)	OCR
11.73	38.5	326.97	0.43	Gravelly Sand to Sand	SW	dense	120	6.3	52	2.238	1.473	0.43	0.50	0.85	261.9	1.35	261.9	42	52	100	39	
11.89	39.0	104.87	2.04	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	22	2.268	1.488	2.08	0.67	0.80	78.9	2.20	131.6	18	26	67	33	
12.04	39.5	45.73	3.62	Clayey Silt to Silty Clay	ML/CL	hard	120	3.8	12	2.298	1.502	3.82	0.81	0.75	32.6	2.66	12				2.60	8.7
12.19	40.0	87.97	0.97	Sand to Silty Sand	SP/SM	medium dense	120	5.0	18	2.328	1.516	1.00	0.63	0.80	66.4	2.05	91.0	14	18	60	31	
12.34	40.5	62.37	1.96	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.4	14	2.358	1.531	2.03	0.72	0.77	45.1	2.37	99.6	12	20	44	31	
12.50	41.0	49.37	3.87	Clayey Silt to Silty Clay	ML/CL	hard	120	3.8	13	2.388	1.545	4.07	0.81	0.74	34.3	2.66	13				2.81	9.1
12.65	41.5	47.77	2.27	Sandy Silt to Clayey Silt	ML	loose	120	4.1	12	2.418	1.560	2.39	0.77	0.74	33.5	2.52	95.8	9	19	31	30	
12.80	42.0	67.77	1.64	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.5	15	2.448	1.574	1.71	0.70	0.76	48.5	2.30	94.6	12	19	47	31	
12.95	42.5	61.90	1.52	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.5	14	2.478	1.588	1.58	0.71	0.75	43.9	2.31	87.5	11	17	43	30	
13.11	43.0	67.13	1.38	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	15	2.508	1.603	1.43	0.69	0.75	47.7	2.26	87.0	12	17	46	31	
13.26	43.5	27.70	3.74	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.4	8	2.538	1.617	4.12	0.88	0.69	18.0	2.88	8				1.53	4.7
13.41	44.0	28.13	3.74	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.4	8	2.568	1.632	4.12	0.88	0.68	18.2	2.87	8				1.56	4.7
13.56	44.5	95.10	1.86	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	21	2.598	1.646	1.91	0.68	0.74	66.6	2.23	115.8	16	23	60	32	
13.72	45.0	264.37	0.79	Sand	SP	dense	120	5.8	45	2.628	1.660	0.79	0.50	0.80	199.5	1.62	199.5	35	40	100	37	
13.87	45.5	287.23	0.92	Sand	SP	dense	120	5.8	50	2.658	1.675	0.93	0.50	0.79	215.5	1.64	215.4	38	43	100	38	
14.02	46.0	300.63	0.95	Sand	SP	dense	120	5.8	52	2.688	1.689	0.96	0.50	0.79	224.7	1.64	224.0	40	45	100	38	
14.17	46.5	313.13	0.89	Sand	SP	dense	120	5.8	54	2.718	1.704	0.90	0.50	0.79	233.2	1.61	233.2	41	47	100	39	
14.33	47.0	326.83	0.44	Gravelly Sand to Sand	SW	dense	120	6.3	52	2.748	1.718	0.45	0.50	0.78	242.4	1.39	242.4	40	48	100	38	
14.48	47.5	355.77	0.37	Gravelly Sand to Sand	SW	dense	120	6.4	55	2.778	1.732	0.37	0.50	0.78	262.8	1.31	262.8	42	53	100	39	
14.63	48.0	395.37	0.43	Gravelly Sand to Sand	SW	dense	120	6.4	62	2.808	1.747	0.43	0.50	0.78	290.8	1.32	290.8	47	58	100	40	
14.78	48.5	417.77	0.85	Gravelly Sand to Sand	SW	very dense	120	6.0	89	2.838	1.761	0.86	0.50	0.78	306.1	1.52	306.1	52	61	100	41	
14.94	49.0	491.97	1.25	Sand	SP	very dense	120	5.9	84	2.868	1.776	1.26	0.50	0.77	358.9	1.61	358.9	63	72	100	43	
15.09	49.5	474.23	0.64	Gravelly Sand to Sand	SW	very dense	120	6.3	76	2.898	1.790	0.64	0.50	0.77	344.6	1.39	344.6	56	69	100	42	
15.24	50.0	458.57	0.34	Gravelly Sand to Sand	SW	very dense	120	6.6	89	2.928	1.804	0.34	0.50	0.77	331.9	1.21	331.9	52	66	100	41	
15.39	50.5	471.73	0.49	Gravelly Sand to Sand	SW	very dense	120	6.4	73	2.958	1.819	0.49	0.50	0.76	340.1	1.31	340.1	54	68	100	41	
15.54	51.0	419.03	0.49	Gravelly Sand to Sand	SW	dense	120	6.4	86	2.987	1.833	0.49	0.50	0.76	300.9	1.35	300.9	49	60	100	40	
15.70	51.5	407.20	0.39	Gravelly Sand to Sand	SW	dense	120	6.5	83	3.017	1.847	0.40	0.50	0.76	291.3	1.30	291.3	46	58	100	40	
15.85	52.0	378.67	0.33	Gravelly Sand to Sand	SW	dense	120	6.5	58	3.047	1.862	0.33	0.50	0.75	269.8	1.28	269.8	43	54	100	39	
16.00	52.5	398.60	0.31	Gravelly Sand to Sand	SW	dense	120	6.6	61	3.077	1.876	0.31	0.50	0.75	282.9	1.24	282.9	44	57	100	39	
16.15	53.0	441.37	0.36	Gravelly Sand to Sand	SW	dense	120	6.6	67	3.107	1.891	0.36	0.50	0.75	312.1	1.25	312.1	49	62	100	40	
16.31	53.5	433.47	0.40	Gravelly Sand to Sand	SW	dense	120	6.5	67	3.137	1.905	0.40	0.50	0.75	305.3	1.29	305.3	48	61	100	40	
16.46	54.0	402.17	0.39	Gravelly Sand to Sand	SW	dense	120	6.4	62	3.167	1.919	0.39	0.50	0.74	282.2	1.30	282.2	45	56	100	40	
16.61	54.5	345.97	0.59	Gravelly Sand to Sand	SW	dense	120	6.1	57	3.197	1.934	0.59	0.50	0.74	241.9	1.47	241.9	41	48	100	39	
16.76	55.0	327.13	0.60	Gravelly Sand to Sand	SW	dense	120	6.1	54	3.227	1.948	0.60	0.50	0.74	227.9	1.50	227.9	39	46	100	38	
16.92	55.5	305.63	0.85	Gravelly Sand to Sand	SW	dense	120	6.0	51	3.257	1.963	0.66	0.50	0.73	212.1	1.54	212.1	37	42	100	38	
17.07	56.0	288.20	0.85	Gravelly Sand to Sand	SW	dense	120	5.9	49	3.287	1.977	0.66	0.50	0.73	199.3	1.56	199.3	35	40	100	37	
17.22	56.5	306.03	0.56	Gravelly Sand to Sand	SW	dense	120	6.1	51	3.317	1.991	0.56	0.50	0.73	210.8	1.50	210.8	36	42	100	37	
17.37	57.0	253.13	0.61	Sand	SP	dense	120	5.9	43	3.347	2.006	0.61	0.50	0.73	173.8	1.59	173.8	30	35	100	36	
17.53	57.5	89.30	2.71	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	21	3.377	2.020	2.81	0.74	0.62	52.4	2.42	125.3	15	25	50	32	
17.68	58.0	34.50	4.80	Silty Clay to Clay	CL	very stiff	120	3.2	11	3.407	2.035	5.33	0.90	0.56	18.1	2.95	11				1.91	4.6
17.83	58.5	19.07	4.51	Clay	CL/CH	very stiff	120	2.8	7	3.437	2.049	5.51	0.97	0.53	9.5	3.17	7				1.00	2.3
17.98	59.0	11.00	2.73	Silty Clay to Clay	CL	stiff	120	2.6	4	3.467	2.063	3.98	1.00	0.51	5.3	3.29	4				0.53	1.1
18.14	59.5	14.17	3.42	Silty Clay to Clay	CL	stiff	120	2.7	5	3.497	2.078	4.54	1.00	0.51	6.8	3.24	5				0.71	1.5
18.29	60.0	36.80	2.20	Sandy Silt to Clayey Silt	ML	hard	120	3.7	10	3.527	2.092	2.43	0.83	0.57	19.8	2.70	10				2.04	4.8
18.44	60.5	15.73	4.75	Clay	CL/CH	stiff	120	2.6	6	3.557	2.107	6.14	1.00	0.50	7.5	3.28	6				0.80	1.7
18.59	61.0	85.07	0.97	Sand to Silty Sand	SP/SM	medium dense	120	4.8	18	3.587	2.121	1.01	0.66	0.63	50.9	2.15	78.8	12	16	49	31	
18.75	61.5	223.50	0.46	Sand	SP	medium dense	120	5.9	38	3.617	2.135	0.46	0.50	0.70	148.7	1.57	148.7	26	30	93	35	
18.90	62.0	339.00	0.51	Gravelly Sand to Sand	SW	dense	120	6.1	55	3.647	2.150	0.52	0.50	0.70	224.8	1.46	224.8	38	45	100	38	
19.05	62.5	393.53	0.37	Gravelly Sand to Sand	SW	dense	120	6.4	61	3.677	2.164	0.38	0.50	0.70	260.1	1.32	260.1	42	52	100	39	
19.20	63.0	399.57	0.44	Gravelly Sand to Sand	SW	dense	120	6.3	63	3.707	2.179	0.44	0.50	0.70	263.2	1.36	263.2	43	53	100	39	
19.35	63.5	365.87	0.40	Gravelly Sand to Sand	SW	dense	120	6.3	58	3.737	2.193	0.40	0.50	0.69	240.2	1.37	240.2	39	48	100	38	
19.51	64.0	395.70	0.39	Gravelly Sand to Sand	SW	dense	120	6.4	62	3.767	2.207	0.39	0.50	0.69	258.9	1.34	258.9	42	52	100	39	
19.66	64.5	379.53	0.46	Gravelly Sand to Sand	SW	dense	120	6.3	61	3.797	2.222	0.47	0.50	0.69	247.5	1.40	247.5	41	50	100	39	



CPT No: CPT-2

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017

DEPTH (FEET)

Interpreted Soil Stratigraphy
Robertson & Campanella ('89)

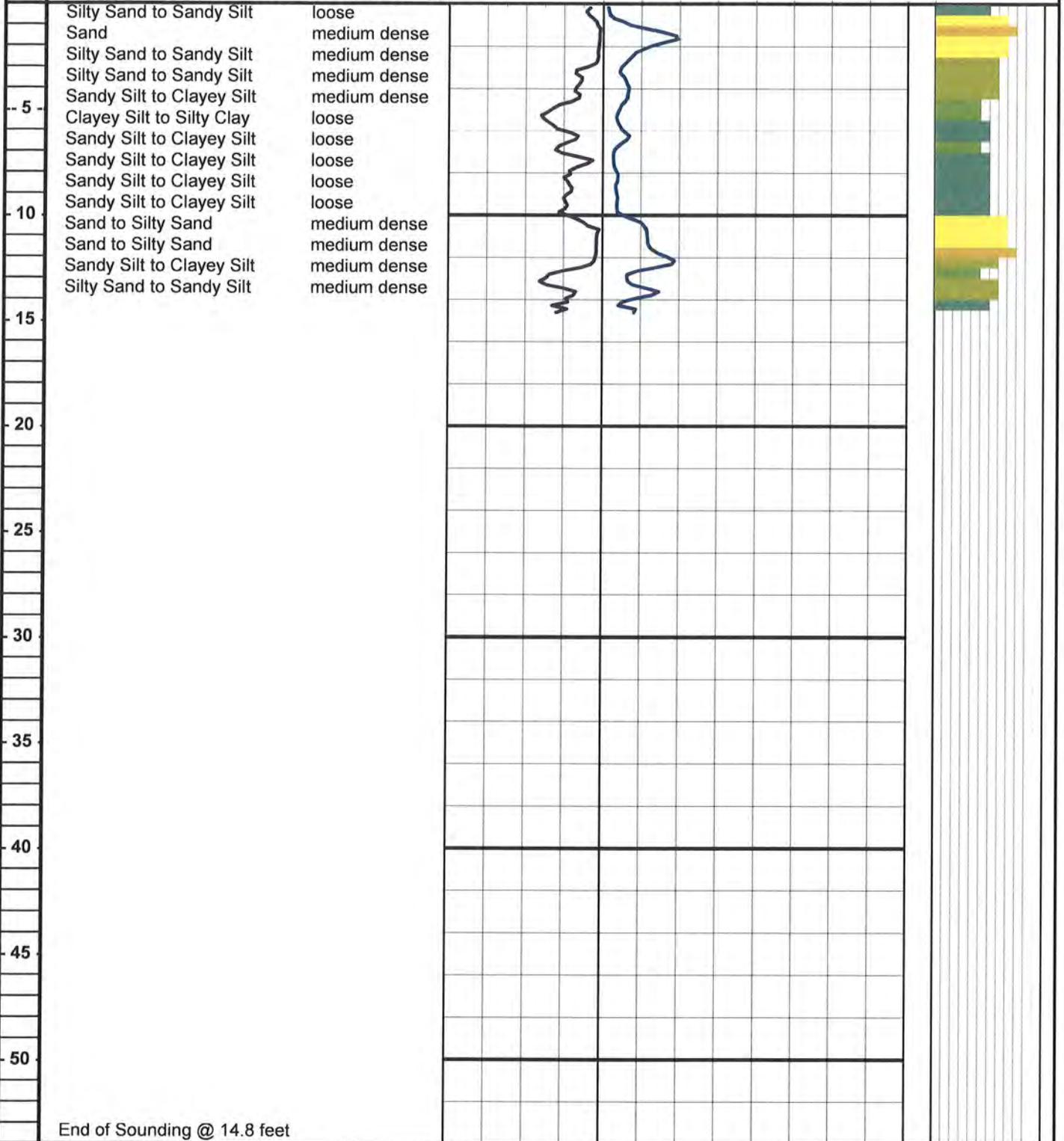
Density/Consistency

Friction Ratio (%)

Tip Resistance, Qc (tsf)

Graphic Log (SBT)

8 6 4 2 0 50 100 150 200 250 300 350 400 0 12



End of Sounding @ 14.8 feet



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-2		Plot: 2		Density: 1		SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest															
Est. GWT (feet): 14.0				Dr correlation: 0		Baldi		Qc/N: 0		Jefferies & Davies					Phi Correlation: 4					SPT N			
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc to N	Total po tsf	p'o tsf	F	n	Cq	Norm: 2.6	Qc1n	ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel Dens Dr (%)	Phi (deg.)	Nk: 17	Su (tsf)	OCR
0.15	0.5	9.57	0.70	Sandy Silt to Clayey Silt	ML	very loose	110	4.1	2	0.014	0.014	0.70	0.76	1.70	15.4	2.52	44.2	4	9	-1	28		
0.30	1.0	39.33	0.26	Sand to Silty Sand	SP/SM	medium dense	100	5.5	7	0.040	0.040	0.26	0.54	1.70	63.2	1.78	63.2	12	13	58	31		
0.46	1.5	90.03	0.17	Sand	SP	medium dense	100	6.3	14	0.065	0.065	0.17	0.50	1.70	144.7	1.39	144.7	24	29	92	35		
0.61	2.0	63.87	0.22	Sand to Silty Sand	SP/SM	medium dense	100	5.9	11	0.090	0.090	0.22	0.50	1.70	102.6	1.57	102.6	18	21	78	33		
0.76	2.5	37.67	0.26	Sand to Silty Sand	SP/SM	medium dense	100	5.5	7	0.115	0.115	0.26	0.55	1.70	60.5	1.80	60.5	12	12	56	31		
0.91	3.0	25.10	0.83	Silty Sand to Sandy Silt	SM/ML	loose	110	4.7	5	0.141	0.141	0.83	0.66	1.70	40.3	2.19	65.9	9	13	39	30		
1.07	3.5	26.23	1.20	Silty Sand to Sandy Silt	SM/ML	loose	110	4.6	6	0.169	0.169	1.21	0.69	1.70	42.2	2.26	76.7	10	15	41	30		
1.22	4.0	32.50	1.35	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	7	0.196	0.196	1.36	0.67	1.70	52.2	2.21	88.9	12	18	50	31		
1.37	4.5	30.67	1.35	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.6	7	0.224	0.224	1.36	0.68	1.70	49.3	2.23	86.4	11	17	47	30		
1.52	5.0	21.90	2.56	Clayey Silt to Silty Clay	ML/CL	loose	110	4.1	5	0.251	0.251	2.59	0.77	1.70	35.2	2.52	101.7	9	20	33	30		
1.68	5.5	18.88	2.91	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.9	5	0.279	0.279	2.95	0.79	1.70	30.3	2.61		5				1.09	20.0
1.83	6.0	29.00	1.77	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	7	0.306	0.306	1.79	0.71	1.70	46.6	2.33	94.9	11	19	45	30		
1.98	6.5	25.00	1.86	Sandy Silt to Clayey Silt	ML	loose	110	4.3	6	0.334	0.334	1.88	0.73	1.70	40.2	2.39	91.4	10	18	39	30		
2.13	7.0	13.73	1.95	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.9	4	0.361	0.361	2.00	0.80	1.70	22.1	2.61		4				0.79	11.1
2.29	7.5	13.80	0.88	Sandy Silt to Clayey Silt	ML	loose	110	4.2	3	0.389	0.389	0.91	0.74	1.70	22.2	2.43	54.0	5	11	14	28		
2.44	8.0	18.33	1.80	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.416	0.416	1.84	0.76	1.70	29.5	2.49	80.3	7	16	26	29		
2.59	8.5	17.23	1.72	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.444	0.444	1.76	0.76	1.70	27.7	2.50	77.0	6	15	24	29		
2.74	9.0	18.00	1.85	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.471	0.471	1.90	0.76	1.70	28.9	2.51	80.9	6	16	25	29		
2.90	9.5	18.07	1.90	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.499	0.499	1.95	0.76	1.70	29.0	2.51	82.2	6	16	26	29		
3.05	10.0	28.03	1.79	Sandy Silt to Clayey Silt	ML	loose	110	4.4	6	0.526	0.526	1.82	0.72	1.65	43.7	2.35	93.2	9	19	42	30		
3.20	10.5	53.47	0.63	Sand to Silty Sand	SP/SM	medium dense	100	5.3	10	0.553	0.553	0.64	0.58	1.46	73.7	1.90	87.7	14	18	64	31		
3.35	11.0	58.03	0.28	Sand to Silty Sand	SP/SM	medium dense	120	5.6	10	0.580	0.580	0.28	0.53	1.38	75.4	1.73	75.4	14	15	65	31		
3.51	11.5	61.40	0.30	Sand to Silty Sand	SP/SM	medium dense	120	5.6	11	0.610	0.610	0.31	0.53	1.34	77.7	1.73	77.7	14	16	66	31		
3.66	12.0	83.93	0.38	Sand	SP	medium dense	120	5.7	15	0.640	0.640	0.38	0.51	1.29	102.4	1.66	102.4	18	20	78	33		
3.81	12.5	68.13	1.26	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.0	14	0.670	0.670	1.27	0.62	1.33	85.4	2.03	114.5	17	23	70	32		
3.96	13.0	32.07	2.98	Clayey Silt to Silty Clay	ML/CL	loose	120	4.1	8	0.700	0.700	3.05	0.77	1.37	41.6	2.52	118.5	9	24	40	30		
4.11	13.5	58.50	2.10	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	12	0.730	0.730	2.13	0.68	1.29	68.8	2.25	123.7	14	25	61	31		
4.27	14.0	43.70	1.72	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.5	10	0.760	0.760	1.75	0.70	1.26	52.0	2.28	98.8	11	20	50	30		
4.42	14.5	34.93	2.27	Sandy Silt to Clayey Silt	ML	loose	120	4.2	8	0.790	0.774	2.32	0.74	1.26	41.6	2.44	102.8	9	21	40	30		



CPT No: CPT-3

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017

DEPTH (FEET)

Interpreted Soil Stratigraphy
Robertson & Campanella ('89)

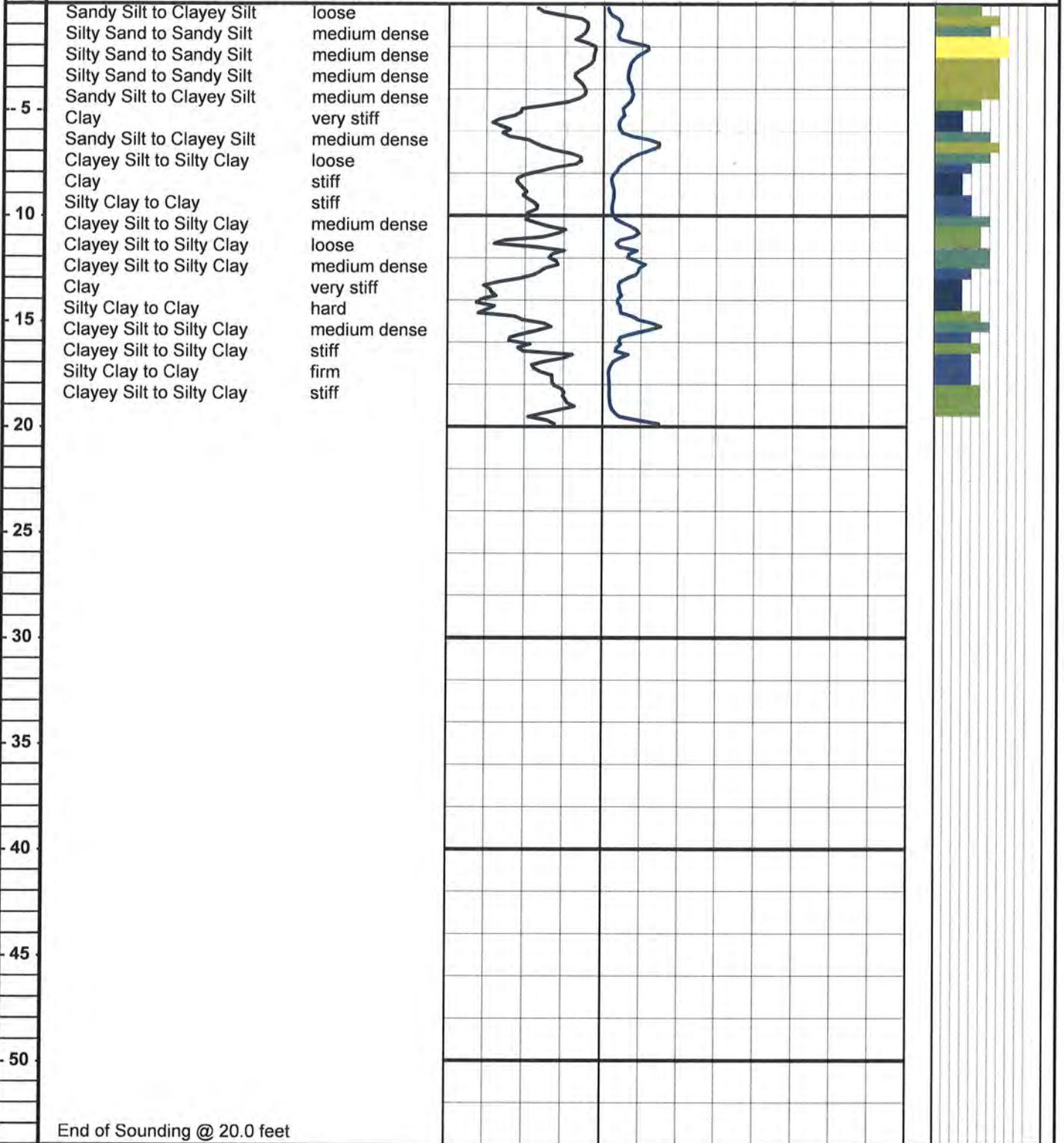
Density/Consistency

Friction Ratio (%)

Tip Resistance, Qc (tsf)

Graphic Log (SBT)

8 6 4 2 0 50 100 150 200 250 300 350 400 0 12



End of Sounding @ 20.0 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-3		Plot: 3		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																		
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies		Phi Correlation: 4		SPT N												
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1n	2.6 Ic	Clean Sand Qc1n	Clean Sand N1(60)	Rel Sand N1(60)	Dens. Dr (%)	Phi (deg)	Su (tsf)	Nk: 17	OCR
0.15	0.5	11.37	2.15	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.7	3	0.014	0.014	2.15	0.82	1.70	18.3	2.70							0.67	###
0.30	1.0	22.03	0.86	Silty Sand to Sandy Silt	SM/ML	loose	110	4.6	5	0.041	0.041	0.86	0.68	1.70	35.4	2.24	62.9	8	13	34	29			
0.46	1.5	19.53	1.19	Sandy Silt to Clayey Silt	ML	loose	110	4.4	4	0.069	0.069	1.19	0.72	1.70	31.4	2.36	67.9	8	14	29	29			
0.61	2.0	50.97	0.59	Sand to Silty Sand	SP/SM	medium dense	100	5.4	9	0.095	0.095	0.59	0.56	1.70	81.9	1.85	93.5	16	19	69	32			
0.76	2.5	43.57	0.51	Sand to Silty Sand	SP/SM	medium dense	100	5.3	8	0.120	0.120	0.52	0.57	1.70	70.0	1.87	81.5	14	16	62	31			
0.91	3.0	33.60	0.94	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	7	0.146	0.146	0.94	0.64	1.70	54.0	2.11	79.4	12	16	51	31			
1.07	3.5	31.43	1.41	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.6	7	0.174	0.174	1.42	0.68	1.70	50.5	2.24	89.0	12	18	48	31			
1.22	4.0	35.77	1.01	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	7	0.201	0.201	1.01	0.64	1.70	57.5	2.10	84.1	12	17	54	31			
1.37	4.5	35.90	1.34	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	8	0.229	0.229	1.35	0.66	1.70	57.7	2.18	93.2	13	19	54	31			
1.52	5.0	28.53	3.79	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.0	7	0.256	0.256	3.83	0.78	1.70	42.6	2.58	135.8	11	27	41	30			
1.68	5.5	22.30	5.22	Clay	CL/CH	very stiff	110	3.7	6	0.284	0.284	5.29	0.83	1.70	35.8	2.73							1.30	23.3
1.83	6.0	27.30	4.94	Clay	CL/CH	very stiff	110	3.8	7	0.311	0.311	5.00	0.80	1.70	43.9	2.65							1.59	26.0
1.98	6.5	68.07	3.50	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	15	0.339	0.339	3.52	0.69	1.70	109.4	2.27	204.1	25	41	81	35			
2.13	7.0	48.93	1.79	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	10	0.366	0.366	1.81	0.66	1.70	78.6	2.16	123.6	17	25	67	32			
2.29	7.5	25.00	1.67	Sandy Silt to Clayey Silt	ML	loose	110	4.4	6	0.394	0.394	1.70	0.72	1.70	40.2	2.36	87.1	9	17	39	30			
2.44	8.0	13.57	3.87	Silty Clay to Clay	CL	stiff	110	3.5	4	0.421	0.421	3.99	0.85	1.70	21.8	2.80							0.77	9.4
2.59	8.5	11.67	4.27	Clay	CL/CH	stiff	110	3.4	3	0.449	0.449	4.44	0.88	1.70	18.7	2.88							0.66	7.5
2.74	9.0	13.23	3.96	Clay	CL/CH	stiff	110	3.5	4	0.476	0.476	4.13	0.86	1.70	21.3	2.82							0.75	8.0
2.90	9.5	11.23	3.47	Silty Clay to Clay	CL	stiff	110	3.4	3	0.504	0.504	3.63	0.86	1.70	18.0	2.84							0.63	6.4
3.05	10.0	13.87	3.89	Silty Clay to Clay	CL	stiff	110	3.5	4	0.531	0.531	4.04	0.85	1.70	22.3	2.80							0.78	7.5
3.20	10.5	34.33	2.73	Sandy Silt to Clayey Silt	ML	medium dense	110	4.3	8	0.559	0.559	2.78	0.74	1.60	51.9	2.42	123.9	11	25	50	30			
3.35	11.0	35.83	3.48	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	9	0.588	0.588	3.54	0.76	1.56	52.8	2.49	142.7	11	29	50	30			
3.51	11.5	26.93	3.68	Clayey Silt to Silty Clay	ML/CL	loose	120	3.9	7	0.618	0.618	3.76	0.79	1.53	39.0	2.60	129.4	9	26	38	30			
3.66	12.0	36.37	2.60	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	9	0.648	0.648	2.64	0.74	1.44	49.3	2.42	118.1	11	24	48	30			
3.81	12.5	49.10	2.85	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	11	0.678	0.678	2.89	0.72	1.38	63.9	2.37	139.1	14	28	58	31			
3.96	13.0	31.77	4.41	Silty Clay to Clay	CL	very stiff	120	3.8	8	0.708	0.708	4.51	0.80	1.38	41.4	2.64							1.83	13.2
4.11	13.5	20.73	5.89	Clay	CL/CH	very stiff	120	3.4	6	0.738	0.738	6.11	0.87	1.37	26.8	2.86							1.18	8.1
4.27	14.0	20.53	6.09	Clay	CL/CH	very stiff	120	3.4	6	0.768	0.768	6.32	0.88	1.33	25.7	2.89							1.16	7.7
4.42	14.5	22.63	5.99	Clay	CL/CH	very stiff	120	3.4	7	0.798	0.782	6.21	0.87	1.30	27.8	2.86							1.29	8.4
4.57	15.0	49.40	3.87	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	12	0.828	0.796	3.94	0.76	1.24	57.9	2.49	158.0	13	32	54	31			
4.72	15.5	58.13	3.34	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	14	0.858	0.811	3.39	0.73	1.21	66.7	2.40	155.0	15	31	60	32			
4.88	16.0	21.05	4.41	Silty Clay to Clay	CL	very stiff	120	3.5	6	0.888	0.825	4.61	0.85	1.24	24.6	2.81							1.19	7.3
5.03	16.5	23.77	2.54	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.9	6	0.918	0.840	2.65	0.80	1.20	27.0	2.62							1.35	8.2
5.18	17.0	10.90	3.38	Silty Clay to Clay	CL	stiff	120	3.2	3	0.948	0.854	3.70	0.91	1.21	12.5	2.97							0.59	3.5
5.33	17.5	7.40	2.80	Silty Clay to Clay	CL	firm	120	3.0	2	0.978	0.868	3.22	0.94	1.21	8.4	3.08							0.38	2.2
5.49	18.0	8.27	2.38	Silty Clay to Clay	CL	firm	120	3.1	3	1.008	0.883	2.72	0.92	1.18	9.2	3.00							0.43	2.5
5.64	18.5	8.60	1.98	Clayey Silt to Silty Clay	ML/CL	firm	120	3.2	3	1.038	0.897	2.25	0.90	1.16	9.4	2.95							0.45	2.5
5.79	19.0	10.63	1.83	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.4	3	1.068	0.912	2.03	0.87	1.14	11.4	2.85							0.57	3.1
5.94	19.5	27.73	3.24	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	7	1.098	0.926	3.37	0.81	1.11	29.2	2.66							1.58	8.6



CPT No : CPT-4

Cone Penetrometer: Kehoe Testing and Engineering

Project Name: Doris and Patterson

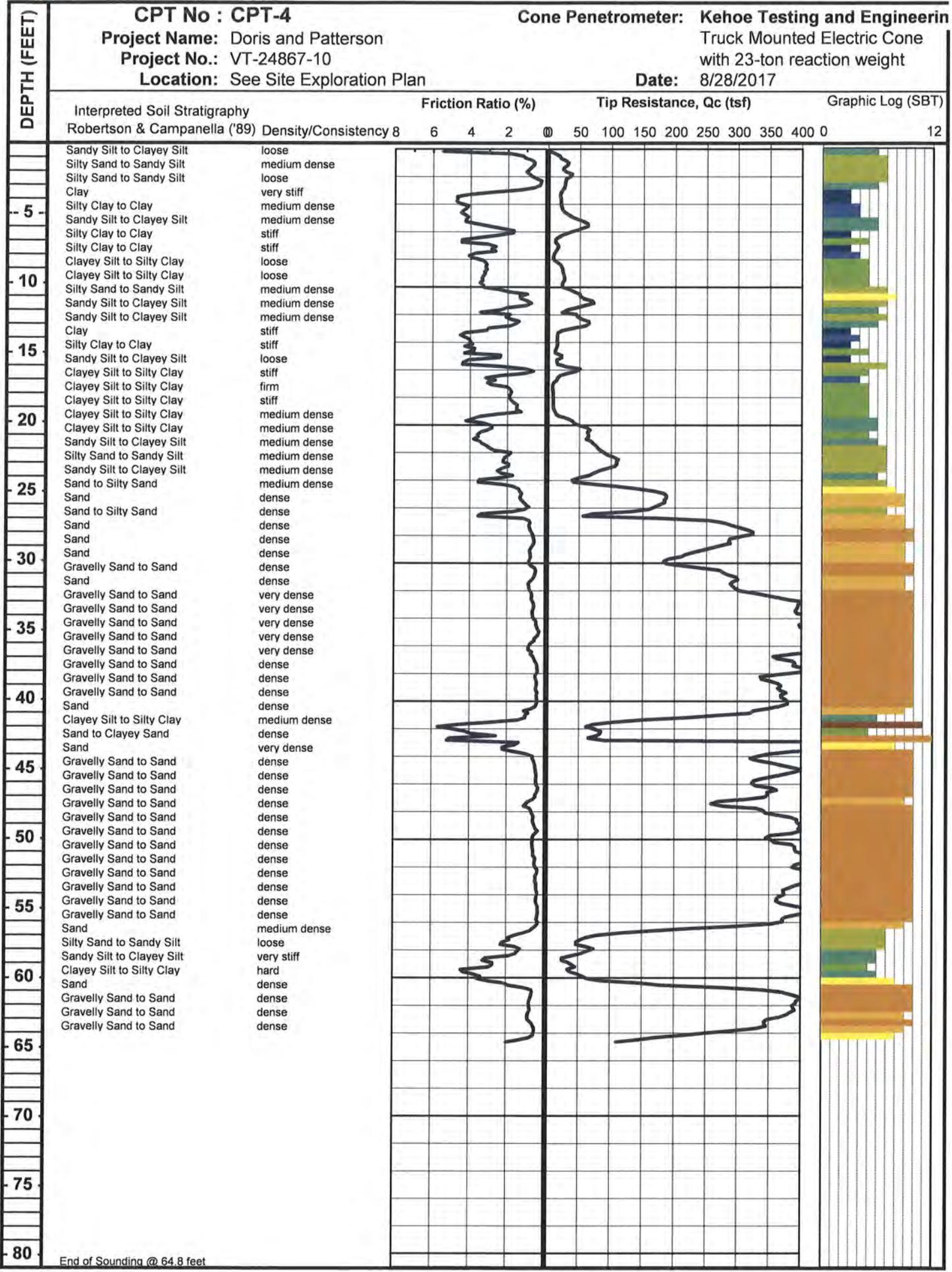
Truck Mounted Electric Cone

Project No.: VT-24867-10

with 23-ton reaction weight

Location: See Site Exploration Plan

Date: 8/28/2017



End of Sounding @ 64.8 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-4		Plot: 4		Density: 1		SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest														
Est. GWT (feet): 14.0				Dr correlation: 0		Baldi		Qc/N: 0		Jeffries & Davies				Phi Correlation: 4				SPT N				
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Ref. Dr (%)	Phi (deg)	Nk Su (tsf)	OCR
0.15	0.5	15.67	1.40	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.014	0.014	1.41	0.75	1.70	25.2	2.48	67.2	6	13	20	29	
0.30	1.0	29.37	0.85	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	6	0.041	0.041	0.65	0.63	1.70	47.2	2.07	66.4	10	13	46	30	
0.46	1.5	25.13	0.90	Silty Sand to Sandy Silt	SM/ML	loose	110	4.7	5	0.069	0.069	0.90	0.67	1.70	40.4	2.20	67.5	9	14	39	30	
0.61	2.0	33.30	0.71	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	7	0.096	0.096	0.71	0.62	1.70	53.5	2.05	73.0	11	15	51	30	
0.76	2.5	26.17	0.27	Silty Sand to Sandy Silt	SM/ML	loose	110	5.2	5	0.124	0.124	0.27	0.80	1.70	42.0	1.96	42.0	9	8	41	29	
0.91	3.0	22.17	1.58	Sandy Silt to Clayey Silt	ML	loose	110	4.3	5	0.151	0.151	1.59	0.73	1.70	35.6	2.39	80.8	9	16	34	30	
1.07	3.5	18.77	4.51	Clay	CL/CH	very stiff	110	3.6	5	0.179	0.179	4.55	0.83	1.70	30.2	2.74		5			1.09	31.2
1.22	4.0	19.67	4.50	Clay	CL/CH	very stiff	110	3.7	5	0.206	0.206	4.54	0.83	1.70	31.6	2.72		5			1.14	28.3
1.37	4.5	23.10	4.38	Silty Clay to Clay	CL	very stiff	110	3.8	6	0.234	0.234	4.42	0.81	1.70	37.1	2.66		6			1.35	29.3
1.52	5.0	38.50	4.24	Silty Clay to Clay	CL	medium dense	110	4.1	9	0.261	0.261	4.27	0.76	1.70	61.9	2.50	170.6	16	34	57	32	
1.68	5.5	58.23	3.34	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	13	0.289	0.289	3.36	0.70	1.70	93.6	2.30	182.7	22	37	74	34	
1.83	6.0	31.10	1.98	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	7	0.316	0.316	2.00	0.71	1.70	50.0	2.33	103.2	12	21	48	31	
1.98	6.5	12.23	4.15	Clay	CL/CH	stiff	110	3.4	4	0.344	0.344	4.27	0.87	1.70	19.7	2.86		4			0.70	10.4
2.13	7.0	14.60	2.86	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.7	4	0.371	0.371	2.94	0.82	1.70	23.5	2.69		4			0.84	11.5
2.29	7.5	9.70	3.51	Clay	CL/CH	stiff	110	3.3	3	0.399	0.399	3.66	0.88	1.70	15.6	2.89		3			0.55	7.0
2.44	8.0	10.40	3.49	Silty Clay to Clay	CL	stiff	110	3.4	3	0.426	0.426	3.64	0.87	1.70	16.7	2.87		3			0.59	7.0
2.59	8.5	20.80	3.16	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.9	5	0.454	0.454	3.23	0.79	1.70	33.4	2.60		5			1.20	13.5
2.74	9.0	23.60	3.28	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	6	0.481	0.481	3.34	0.78	1.70	37.9	2.57	120.0	9	24	37	29	
2.90	9.5	24.17	3.42	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	6	0.509	0.509	3.50	0.78	1.70	38.8	2.58	124.1	9	25	38	29	
3.05	10.0	26.33	3.02	Clayey Silt to Silty Clay	ML/CL	loose	110	4.1	6	0.536	0.536	3.08	0.77	1.69	41.9	2.52	119.6	9	24	41	30	
3.20	10.5	47.17	1.44	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	10	0.564	0.564	1.46	0.85	1.51	67.3	2.15	104.1	13	21	60	31	
3.35	11.0	65.77	1.02	Sand to Silty Sand	SP/SM	medium dense	120	5.2	13	0.593	0.593	1.03	0.60	1.41	88.0	1.96	110.2	17	22	71	32	
3.51	11.5	43.60	1.84	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	10	0.623	0.623	1.87	0.69	1.44	59.4	2.26	108.2	12	22	55	31	
3.66	12.0	37.57	2.49	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	9	0.653	0.653	2.54	0.73	1.42	50.5	2.40	116.8	11	23	49	30	
3.81	12.5	60.10	1.63	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	13	0.683	0.683	1.85	0.85	1.33	75.6	2.14	116.6	15	23	65	32	
3.96	13.0	40.20	2.68	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	9	0.713	0.713	2.73	0.74	1.34	50.8	2.42	121.7	11	24	49	30	
4.11	13.5	14.63	4.38	Clay	CL/CH	stiff	120	3.3	4	0.743	0.743	4.61	0.88	1.37	18.9	2.89		4			0.82	5.6
4.27	14.0	14.37	3.99	Silty Clay to Clay	CL	stiff	120	3.4	4	0.773	0.773	4.22	0.88	1.32	17.9	2.88		4			0.80	5.3
4.42	14.5	12.43	3.98	Clay	CL/CH	stiff	120	3.2	4	0.803	0.803	4.25	0.90	1.30	15.3	2.94		4			0.69	4.4
4.57	15.0	17.77	3.05	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.6	5	0.833	0.801	3.20	0.84	1.26	21.2	2.75		5			1.00	6.3
4.72	15.5	14.23	4.31	Clay	CL/CH	stiff	120	3.3	4	0.863	0.816	4.58	0.89	1.26	17.0	2.93		4			0.79	4.9
4.88	16.0	38.23	1.29	Silty Sand to Sandy Silt	SM/ML	loose	120	4.5	8	0.893	0.830	1.32	0.69	1.18	42.7	2.28	80.0	9	16	42	30	
5.03	16.5	15.53	2.74	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.5	4	0.923	0.845	2.92	0.85	1.21	17.8	2.79		4			0.86	5.2
5.18	17.0	8.03	2.67	Silty Clay to Clay	CL	firm	120	3.1	3	0.953	0.859	3.02	0.93	1.21	9.2	3.03		3			0.42	2.5
5.33	17.5	7.80	1.84	Clayey Silt to Silty Clay	ML/CL	firm	120	3.2	2	0.983	0.873	2.10	0.91	1.19	8.8	2.96		2			0.41	2.3
5.49	18.0	8.37	1.87	Clayey Silt to Silty Clay	ML/CL	firm	120	3.2	3	1.013	0.888	2.13	0.90	1.17	9.3	2.94		3			0.44	2.5
5.64	18.5	8.57	1.56	Clayey Silt to Silty Clay	ML/CL	firm	120	3.3	3	1.043	0.902	1.77	0.89	1.15	9.3	2.90		3			0.45	2.5
5.79	19.0	11.17	1.78	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.5	3	1.073	0.917	1.97	0.87	1.13	12.0	2.83		3			0.60	3.3
5.94	19.5	29.33	3.88	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.7	8	1.103	0.931	4.03	0.82	1.11	30.8	2.69		8			1.67	9.1
6.10	20.0	50.70	2.99	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	12	1.133	0.945	3.08	0.74	1.09	52.1	2.45	130.8	12	26	50	31	
6.25	20.5	64.17	3.37	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	15	1.163	0.960	3.43	0.73	1.07	65.1	2.41	154.3	15	31	59	32	
6.40	21.0	64.43	3.63	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.2	15	1.193	0.974	3.70	0.74	1.06	64.7	2.44	160.4	15	32	59	32	
6.55	21.5	75.37	3.13	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	17	1.223	0.989	3.19	0.71	1.05	74.8	2.35	158.2	17	32	65	32	
6.71	22.0	88.13	2.17	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	19	1.253	1.003	2.20	0.67	1.04	86.3	2.19	141.6	19	28	71	33	
6.86	22.5	107.47	2.19	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	22	1.283	1.017	2.22	0.65	1.03	104.2	2.14	158.7	22	32	79	34	
7.01	23.0	102.37	2.07	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	21	1.313	1.032	2.09	0.65	1.02	98.3	2.13	149.6	21	30	76	34	
7.16	23.5	73.13	2.21	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	16	1.343	1.046	2.25	0.69	1.01	69.7	2.26	127.8	16	26	62	32	
7.32	24.0	42.93	3.10	Sandy Silt to Clayey Silt	ML	medium dense	120	4.0	11	1.373	1.061	3.20	0.77	1.00	40.5	2.54	120.3	10	24	39	30	
7.47	24.5	110.23	1.77	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.9	22	1.403	1.075	1.79	0.63	0.99	103.2	2.07	145.1	22	29	78	34	
7.62	25.0	178.03	1.30	Sand to Silty Sand	SP/SM	dense	120	5.4	33	1.433	1.089	1.31	0.56	0.98	165.6	1.83	187.1	32	37	98	36	
7.77	25.5	184.20	1.24	Sand	SP	dense	120	5.5	34	1.463	1.104	1.25	0.55	0.98	170.1	1.81	189.1	32	38	99	37	
7.92	26.0	167.40	0.98	Sand	SP	medium dense	120	5.5	30	1.493	1.118	0.99	0.54	0.97	153.6	1.77	166.6	29	33	95	36	
8.08	26.5	107.90	2.47	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	23	1.523	1.133	2.51	0.67	0.96	97.5	2.19	161.2	22	32	76	34	
8.23	27.0	273.93	0.82	Sand	SP	dense	120	5.9	46	1.553	1.147	0.83	0.50	0.96	248.7	1.56	248.7	43	50	100	39	
8.38	27.5	312.40	0.78	Sand	SP	dense	120	6.0	52	1.583	1.161	0.78	0.50	0.95	281.8	1.51	281.8	48	56	100	40	
8.53	28.0	305.27	0.62	Gravelly Sand to Sand	SW	dense	120	6.2	50	1.613	1.176	0.83	0.50	0.95	273.7	1.45	273.7	46	55	100	40	
8.69	28.5	281.57	0.60	Gravelly Sand to Sand	SW	dense	120	6.1	46	1.643	1.190	0.60	0.50	0.94	250.9	1.46	250.9	42	50	100	39	
8.84	29.0	243.77	0.78	Sand	SP	dense	120	5.9	41	1.673	1.205	0.79	0.50	0.94	215.9	1.59	215.9	38	43	100	38	
8.99	29.5	205.03	0.78	Sand	SP	dense	120	5.8	36	1.703	1.219	0.79	0.50	0.93	180.5	1.65	181.0	32	36	100	37	
9.14	30.0	193.37	0.80	Sand	SP	dense	120	5.7	34	1.733	1.233	0.81	0.51	0.92	169.0	1.68	172.7	30	35	99	36</	

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-4		Plot: 4		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																
Est. GWT (feet): 14.0		Dr correlation: 0		Baldi		Qc/N: 0		Jeffenes & Davies		Phi Correlation: 4		SPT N										
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1n	2.6 lc	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dens Dr (%)	Phi (deg.)	Nk: 17 Su (tsf)	OCR
11.73	38.5	351.10	0.43	Gravelly Sand to Sand	SW	dense	120	6.4	55	2.243	1.478	0.43	0.50	0.85	280.8	1.33	280.8	45	56	100	40	
11.89	39.0	366.03	0.45	Gravelly Sand to Sand	SW	dense	120	6.4	57	2.273	1.493	0.45	0.50	0.84	291.3	1.33	291.3	47	58	100	40	
12.04	39.5	370.77	0.41	Gravelly Sand to Sand	SW	dense	120	6.4	58	2.303	1.507	0.41	0.50	0.84	293.6	1.31	293.6	47	59	100	40	
12.19	40.0	377.10	0.40	Gravelly Sand to Sand	SW	dense	120	6.5	58	2.333	1.521	0.41	0.50	0.83	297.2	1.30	297.2	47	59	100	40	
12.34	40.5	345.87	0.74	Gravelly Sand to Sand	SW	dense	120	6.0	57	2.363	1.536	0.75	0.50	0.83	271.3	1.51	271.3	46	54	100	40	
12.50	41.0	269.87	0.97	Sand	SP	dense	120	5.7	47	2.393	1.550	0.98	0.51	0.82	209.9	1.67	213.4	36	43	100	38	
12.65	41.5	108.50	2.91	Sandy Silt to Clayey Silt	ML	medium dense	120	4.5	24	2.423	1.565	2.97	0.70	0.76	77.9	2.32	155.6	19	31	66	33	
12.80	42.0	73.63	4.92	Overconsolidated Soil	??	hard	120	3.9	19	2.453	1.579	5.09	0.79	0.73	50.6	2.61		19			4.24	13.5
12.95	42.5	75.67	3.85	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	19	2.483	1.593	3.98	0.77	0.73	52.2	2.53	151.7	15	30	50	32	
13.11	43.0	463.77	2.72	Sand to Clayey Sand	SP/SC	very dense	120	5.3	88	2.513	1.608	2.74	0.58	0.78	344.0	1.90	409.6	69	82	100	44	
13.26	43.5	470.50	2.02	Sand to Silty Sand	SP/SM	very dense	120	5.5	85	2.543	1.622	2.03	0.54	0.79	352.4	1.78	386.2	67	77	100	44	
13.41	44.0	334.00	0.73	Gravelly Sand to Sand	SW	dense	120	6.0	55	2.573	1.637	0.73	0.50	0.80	253.8	1.52	253.8	43	51	100	39	
13.56	44.5	351.13	0.53	Gravelly Sand to Sand	SW	dense	120	6.2	56	2.603	1.651	0.54	0.50	0.80	265.7	1.41	265.7	44	53	100	39	
13.72	45.0	392.83	0.46	Gravelly Sand to Sand	SW	dense	120	6.4	62	2.633	1.665	0.46	0.50	0.80	296.0	1.33	296.0	48	59	100	40	
13.87	45.5	354.77	0.42	Gravelly Sand to Sand	SW	dense	120	6.4	56	2.663	1.680	0.43	0.50	0.79	266.1	1.35	266.1	43	53	100	39	
14.02	46.0	325.57	0.42	Gravelly Sand to Sand	SW	dense	120	6.3	52	2.693	1.694	0.42	0.50	0.79	243.2	1.38	243.2	40	49	100	38	
14.17	46.5	353.83	0.35	Gravelly Sand to Sand	SW	dense	120	6.4	55	2.723	1.709	0.36	0.50	0.79	263.2	1.30	263.2	42	53	100	39	
14.33	47.0	318.50	0.59	Gravelly Sand to Sand	SW	dense	120	6.1	52	2.753	1.723	0.60	0.50	0.78	235.9	1.48	235.9	40	47	100	38	
14.48	47.5	287.70	0.94	Sand	SP	dense	120	5.8	50	2.783	1.737	0.95	0.51	0.78	211.5	1.66	213.2	38	43	100	38	
14.63	48.0	349.23	0.65	Gravelly Sand to Sand	SW	dense	120	6.1	57	2.813	1.752	0.65	0.50	0.78	256.5	1.48	256.5	43	51	100	39	
14.78	48.5	390.13	0.58	Gravelly Sand to Sand	SW	dense	120	6.2	63	2.843	1.766	0.59	0.50	0.77	285.4	1.42	285.4	47	57	100	40	
14.94	49.0	397.93	0.50	Gravelly Sand to Sand	SW	dense	120	6.3	63	2.873	1.781	0.51	0.50	0.77	289.9	1.37	289.9	47	58	100	40	
15.09	49.5	379.33	0.45	Gravelly Sand to Sand	SW	dense	120	6.3	60	2.903	1.795	0.45	0.50	0.77	275.3	1.35	275.3	45	55	100	39	
15.24	50.0	352.40	0.61	Gravelly Sand to Sand	SW	dense	120	6.1	57	2.933	1.809	0.61	0.50	0.76	254.7	1.46	254.7	43	51	100	39	
15.39	50.5	388.50	0.61	Gravelly Sand to Sand	SW	dense	120	6.2	63	2.963	1.824	0.62	0.50	0.76	279.7	1.44	279.7	47	56	100	40	
15.54	51.0	400.60	0.57	Gravelly Sand to Sand	SW	dense	120	6.2	64	2.992	1.838	0.57	0.50	0.76	287.3	1.41	287.3	47	57	100	40	
15.70	51.5	409.93	0.48	Gravelly Sand to Sand	SW	dense	120	6.3	65	3.022	1.852	0.49	0.50	0.76	292.8	1.35	292.8	47	59	100	40	
15.85	52.0	393.37	0.43	Gravelly Sand to Sand	SW	dense	120	6.4	62	3.052	1.867	0.44	0.50	0.75	279.9	1.34	279.9	45	56	100	40	
16.00	52.5	432.07	0.40	Gravelly Sand to Sand	SW	dense	120	6.5	67	3.082	1.881	0.40	0.50	0.75	306.3	1.28	306.3	49	61	100	40	
16.15	53.0	414.17	0.44	Gravelly Sand to Sand	SW	dense	120	6.4	65	3.112	1.896	0.44	0.50	0.75	292.4	1.33	292.4	47	58	100	40	
16.31	53.5	381.77	0.41	Gravelly Sand to Sand	SW	dense	120	6.4	60	3.142	1.910	0.42	0.50	0.74	268.6	1.34	268.6	43	54	100	39	
16.46	54.0	370.97	0.37	Gravelly Sand to Sand	SW	dense	120	6.4	58	3.172	1.924	0.38	0.50	0.74	260.0	1.32	260.0	42	52	100	39	
16.61	54.5	364.13	0.42	Gravelly Sand to Sand	SW	dense	120	6.3	57	3.202	1.939	0.42	0.50	0.74	254.2	1.36	254.2	41	51	100	39	
16.76	55.0	407.23	0.33	Gravelly Sand to Sand	SW	dense	120	6.5	62	3.232	1.953	0.33	0.50	0.74	283.3	1.26	283.3	45	57	100	39	
16.92	55.5	392.80	0.34	Gravelly Sand to Sand	SW	dense	120	6.5	60	3.262	1.968	0.34	0.50	0.73	272.1	1.28	272.1	43	54	100	39	
17.07	56.0	364.57	0.35	Gravelly Sand to Sand	SW	dense	120	6.4	57	3.292	1.982	0.35	0.50	0.73	251.8	1.32	251.8	40	50	100	39	
17.22	56.5	228.67	0.59	Sand	SP	medium dense	120	5.8	39	3.322	1.996	0.60	0.50	0.73	157.3	1.62	157.3	28	31	96	35	
17.37	57.0	84.67	1.53	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	19	3.352	2.011	1.59	0.69	0.64	51.4	2.26	94.2	13	19	49	31	
17.53	57.5	52.55	1.96	Silty Sand to Sandy Silt	SM/ML	loose	120	4.1	13	3.382	2.025	2.10	0.77	0.61	30.2	2.52	86.3	9	17	27	30	
17.68	58.0	64.10	1.39	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.4	15	3.412	2.040	1.47	0.72	0.62	37.9	2.35	79.7	10	16	37	30	
17.83	58.5	29.53	2.73	Sandy Silt to Clayey Silt	ML	very stiff	120	3.4	9	3.442	2.054	3.09	0.87	0.56	15.7	2.85		9			1.62	3.8
17.98	59.0	40.23	2.81	Sandy Silt to Clayey Silt	ML	hard	120	3.7	11	3.472	2.068	3.07	0.83	0.57	21.7	2.73		11			2.24	5.3
18.14	59.5	39.73	4.15	Clayey Silt to Silty Clay	ML/CL	hard	120	3.4	12	3.502	2.083	4.56	0.87	0.55	20.8	2.86		12			2.21	5.2
18.29	60.0	68.47	3.30	Sandy Silt to Clayey Silt	ML	medium dense	120	3.9	17	3.532	2.097	3.48	0.79	0.58	37.8	2.59	122.4	12	24	36	31	
18.44	60.5	199.27	1.69	Sand to Silty Sand	SP/SM	medium dense	120	5.1	39	3.562	2.112	1.72	0.61	0.66	123.4	2.01	161.2	27	32	86	35	
18.59	61.0	364.07	0.64	Gravelly Sand to Sand	SW	dense	120	6.1	60	3.592	2.126	0.65	0.50	0.71	242.7	1.50	242.7	41	49	100	39	
18.75	61.5	396.27	0.72	Gravelly Sand to Sand	SW	dense	120	6.0	66	3.622	2.140	0.73	0.50	0.70	263.3	1.51	263.3	45	53	100	40	
18.90	62.0	389.03	0.77	Gravelly Sand to Sand	SW	dense	120	6.0	65	3.652	2.155	0.77	0.50	0.70	257.7	1.53	257.7	44	52	100	39	
19.05	62.5	383.97	0.79	Gravelly Sand to Sand	SW	dense	120	6.0	64	3.682	2.169	0.80	0.50	0.70	253.4	1.55	253.4	44	51	100	39	
19.20	63.0	352.50	0.81	Sand	SP	dense	120	5.9	60	3.712	2.184	0.82	0.50	0.70	231.9	1.58	231.9	40	46	100	39	
19.35	63.5	339.03	0.55	Gravelly Sand to Sand	SW	dense	120	6.1	56	3.742	2.198	0.56	0.50	0.69	222.3	1.48	222.3	38	44	100	38	
19.51	64.0	254.67	0.53	Sand	SP	medium dense	120	5.9	43	3.772	2.212	0.53	0.50	0.69	166.5	1.57	166.5	29	33	98	36	
19.66	64.5	142.20	1.34	Sand to Silty Sand	SP/SM	medium dense	120	5.0	29	3.802	2.227	1.38	0.63	0.63	84.2	2.06	116.5	19	23	70	33	



CPT No: CPT-5

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017

DEPTH (FEET)

Interpreted Soil Stratigraphy
Robertson & Campanella ('89)

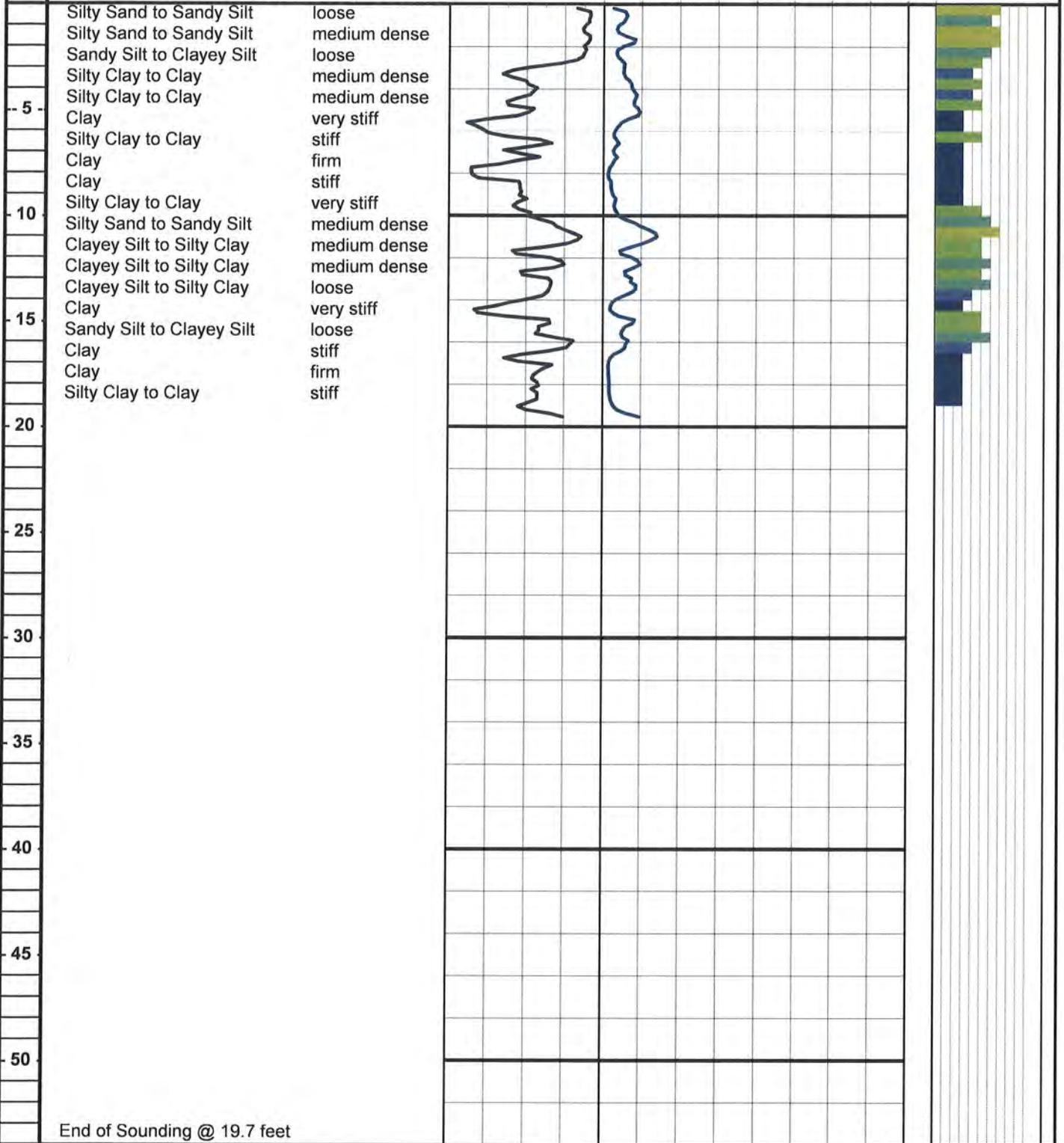
Density/Consistency ⁸

Friction Ratio (%)

Tip Resistance, Qc (tsf)

Graphic Log (SBT)

6 4 2 0 50 100 150 200 250 300 350 400 0 12



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-5		Plot: 5		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4 SPT N										
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N ₁₀₀	Clean Sand N ₁₅₀	Rel. Dens. Dr (%)	Phi (deg)	Nk: Su (tsf)	OCR
0.15	0.5	28.77	0.72	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	6	0.014	0.014	0.72	0.64	1.70	46.2	2.10	67.4	10	13	45	30	
0.30	1.0	20.20	0.93	Sandy Silt to Clayey Silt	ML	loose	110	4.5	4	0.041	0.041	0.93	0.70	1.70	32.5	2.29	62.4	8	12	30	29	
0.46	1.5	29.23	0.82	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	6	0.089	0.089	0.82	0.65	1.70	47.0	2.13	70.7	10	14	45	30	
0.61	2.0	27.20	0.93	Silty Sand to Sandy Silt	SM/ML	loose	110	4.7	6	0.096	0.096	0.94	0.66	1.70	43.7	2.18	71.1	10	14	42	30	
0.76	2.5	19.07	1.18	Sandy Silt to Clayey Silt	ML	loose	110	4.4	4	0.124	0.124	1.19	0.72	1.70	30.6	2.37	67.2	7	13	28	29	
0.91	3.0	26.33	3.58	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.0	7	0.151	0.151	3.60	0.78	1.70	42.3	2.56	130.8	11	26	41	30	
1.07	3.5	29.30	4.69	Silty Clay to Clay	CL	very stiff	110	3.9	8	0.179	0.179	4.72	0.79	1.70	47.1	2.61		8			1.71	48.9
1.22	4.0	37.40	3.70	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	9	0.208	0.208	3.72	0.75	1.70	60.1	2.46	155.6	15	31	56	32	
1.37	4.5	41.37	4.46	Silty Clay to Clay	CL	medium dense	110	4.1	10	0.234	0.234	4.48	0.76	1.70	66.5	2.49	181.7	17	36	60	32	
1.52	5.0	43.97	4.16	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	10	0.261	0.261	4.19	0.74	1.70	70.6	2.45	179.7	18	36	62	33	
1.68	5.5	29.65	6.06	Clay	CL/CH	very stiff	110	3.7	8	0.289	0.289	6.12	0.82	1.70	47.6	2.69		8			1.73	30.5
1.83	6.0	14.07	5.79	Clay	CL/CH	stiff	110	3.3	4	0.316	0.316	5.93	0.88	1.70	22.6	2.91		4			0.81	13.0
1.98	6.5	17.40	3.28	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.8	5	0.344	0.344	3.35	0.81	1.70	28.0	2.67		5			1.00	14.9
2.13	7.0	14.37	4.29	Clay	CL/CH	stiff	110	3.5	4	0.371	0.371	4.40	0.85	1.70	23.1	2.81		4			0.82	11.3
2.29	7.5	10.80	5.57	Clay	CL/CH	stiff	110	3.2	3	0.399	0.399	5.78	0.91	1.70	17.4	2.98		3			0.61	7.8
2.44	8.0	6.13	6.74	Clay	CL/CH	firm	110	2.7	2	0.426	0.426	7.25	0.99	1.70	9.9	3.23		2			0.34	4.0
2.59	8.5	9.70	4.37	Clay	CL/CH	stiff	110	3.2	3	0.454	0.454	4.58	0.90	1.70	15.6	2.95		3			0.54	6.1
2.74	9.0	12.97	4.21	Clay	CL/CH	stiff	110	3.4	4	0.481	0.481	4.37	0.87	1.70	20.8	2.84		4			0.73	7.8
2.90	9.5	14.17	4.52	Clay	CL/CH	stiff	110	3.4	4	0.509	0.509	4.69	0.86	1.70	22.8	2.84		4			0.80	8.1
3.05	10.0	21.97	3.66	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.9	6	0.536	0.536	3.75	0.80	1.70	35.3	2.63		6			1.26	12.0
3.20	10.5	49.70	2.37	Sandy Silt to Clayey Silt	ML	medium dense	110	4.6	11	0.564	0.564	2.40	0.69	1.54	72.5	2.27	134.5	15	27	64	32	
3.35	11.0	66.73	1.36	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.0	13	0.593	0.593	1.37	0.62	1.43	90.3	2.03	121.5	17	24	73	32	
3.51	11.5	36.07	3.20	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.2	9	0.623	0.623	3.26	0.75	1.49	50.8	2.47	133.9	11	27	49	30	
3.66	12.0	35.53	3.14	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	9	0.653	0.653	3.20	0.76	1.44	48.4	2.48	129.8	11	26	47	30	
3.81	12.5	38.37	2.99	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	9	0.683	0.683	3.04	0.75	1.39	50.3	2.46	128.4	11	26	48	30	
3.96	13.0	33.90	3.24	Clayey Silt to Silty Clay	ML/CL	loose	120	4.1	8	0.713	0.713	3.31	0.77	1.36	43.4	2.53	126.3	10	25	42	30	
4.11	13.5	40.93	2.81	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	10	0.743	0.743	2.87	0.74	1.30	50.3	2.44	124.3	11	25	48	30	
4.27	14.0	18.53	3.96	Silty Clay to Clay	CL	very stiff	120	3.5	5	0.773	0.773	4.14	0.85	1.31	22.9	2.80		5			1.04	6.9
4.42	14.5	10.30	6.26	Clay	CL/CH	stiff	120	2.9	4	0.803	0.787	6.79	0.95	1.33	12.9	3.13		4			0.56	3.6
4.57	15.0	33.40	3.55	Clayey Silt to Silty Clay	ML/CL	loose	120	3.9	8	0.833	0.801	3.64	0.79	1.24	39.3	2.59	127.5	9	25	38	30	
4.72	15.5	25.67	3.39	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	7	0.863	0.816	3.51	0.81	1.23	30.0	2.66		7			1.46	9.1
4.88	16.0	29.05	1.94	Sandy Silt to Clayey Silt	ML	loose	120	4.2	7	0.893	0.830	2.00	0.75	1.20	33.0	2.47	87.1	8	17	31	29	
5.03	16.5	15.53	4.08	Silty Clay to Clay	CL	stiff	120	3.3	5	0.923	0.845	4.34	0.88	1.22	17.9	2.89		5			0.86	5.2
5.18	17.0	7.03	3.38	Clay	CL/CH	firm	120	2.9	2	0.953	0.859	3.91	0.96	1.22	8.1	3.14		2			0.36	2.1
5.33	17.5	7.20	3.56	Clay	CL/CH	firm	120	2.8	3	0.983	0.873	4.13	0.97	1.20	8.2	3.15		3			0.37	2.1
5.49	18.0	7.93	3.49	Clay	CL/CH	firm	120	2.9	3	1.013	0.888	4.00	0.95	1.18	8.9	3.11		3			0.41	2.3
5.64	18.5	8.97	3.42	Clay	CL/CH	firm	120	3.0	3	1.043	0.902	3.87	0.94	1.16	9.8	3.07		3			0.47	2.6
5.79	19.0	14.53	4.11	Clay	CL/CH	stiff	120	3.2	4	1.073	0.917	4.44	0.90	1.14	15.6	2.94		4			0.80	4.4



CPT No : CPT-6

Cone Penetrometer: Kehoe Testing and Engineering

Project Name: Doris and Patterson

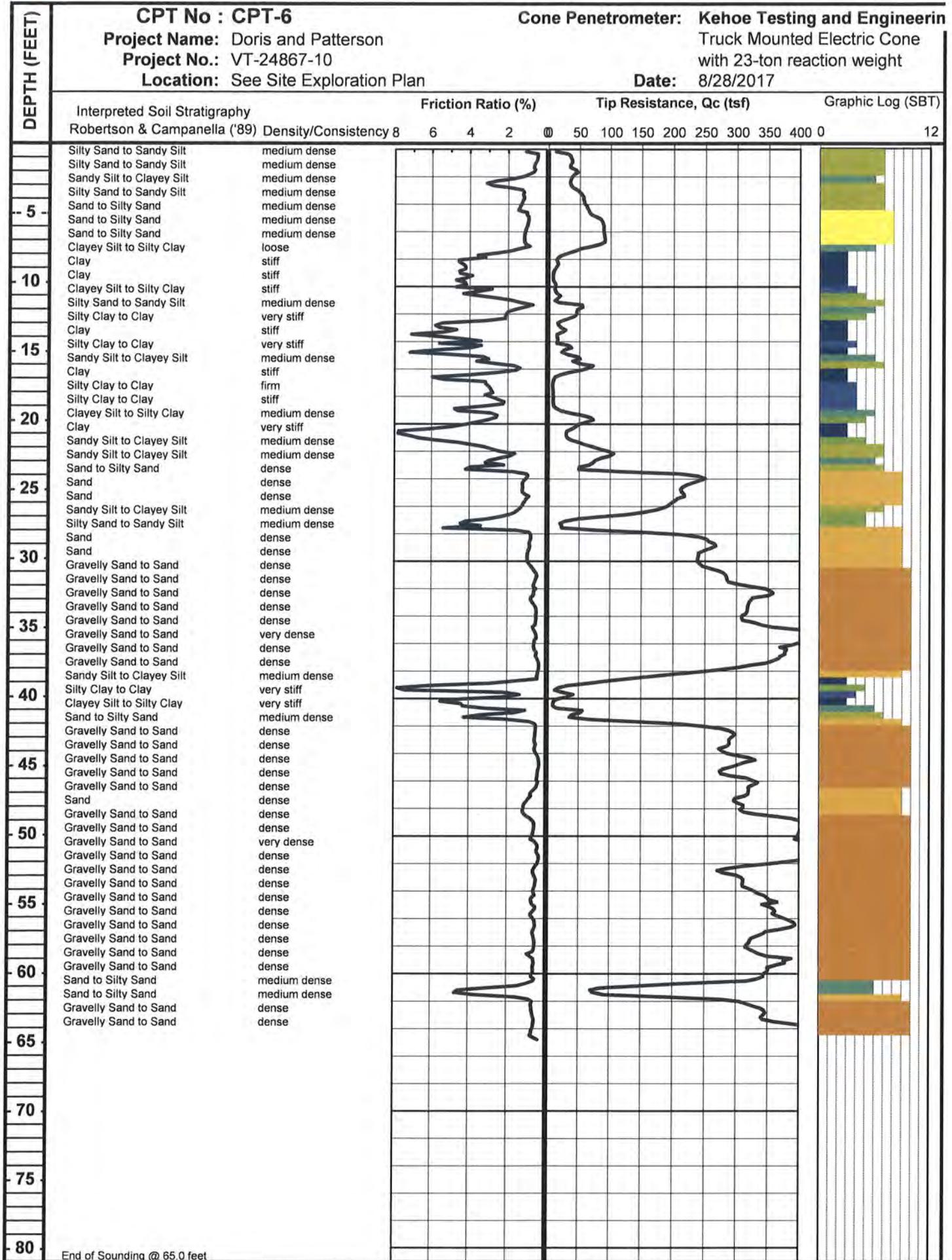
Truck Mounted Electric Cone

Project No.: VT-24867-10

with 23-ton reaction weight

Location: See Site Exploration Plan

Date: 8/28/2017



End of Sounding @ 65.0 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-6		Plot: 6		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																	
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4 SPT N											
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1r	2.6 Ic	Clean Sand N ₁₀₀	Clean Sand N ₁₀₀	Rel. Dens. Dr (%)	Phi (deg.)	Nk Su (tsf)	OCR	
0.15	0.5	33.57	0.47	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	6	0.014	0.014	0.47	0.59	1.70	53.9	1.95	53.9	11	11	51	30		
0.30	1.0	36.13	0.57	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	7	0.041	0.041	0.57	0.60	1.70	58.1	1.97	73.1	12	15	54	31		
0.46	1.5	41.07	0.64	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	8	0.069	0.069	0.64	0.59	1.70	66.0	1.94	81.4	13	16	60	31		
0.61	2.0	38.00	1.29	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	8	0.096	0.096	1.29	0.65	1.70	61.1	2.15	94.4	13	19	56	31		
0.76	2.5	34.50	2.86	Sandy Silt to Clayey Silt	ML	medium dense	110	4.3	8	0.124	0.124	2.87	0.73	1.70	55.4	2.41	129.9	14	26	52	31		
0.91	3.0	44.80	1.46	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.8	9	0.151	0.151	1.46	0.65	1.70	72.0	2.13	108.3	16	22	63	32		
1.07	3.5	54.47	1.20	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	11	0.179	0.179	1.20	0.61	1.70	87.5	2.01	114.5	18	23	71	33		
1.22	4.0	58.10	1.31	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	11	0.206	0.206	1.31	0.61	1.70	93.4	2.01	122.6	20	25	74	33		
1.37	4.5	63.60	1.30	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	12	0.234	0.234	1.31	0.60	1.70	102.2	1.98	130.2	21	26	78	34		
1.52	5.0	76.57	0.97	Sand to Silty Sand	SP/SM	medium dense	100	5.4	14	0.260	0.260	0.97	0.56	1.70	123.0	1.83	139.3	24	28	85	34		
1.68	5.5	87.50	1.00	Sand to Silty Sand	SP/SM	medium dense	100	5.5	16	0.285	0.285	1.00	0.55	1.70	140.6	1.80	155.6	27	31	91	35		
1.83	6.0	88.73	1.12	Sand to Silty Sand	SP/SM	medium dense	100	5.4	16	0.310	0.310	1.13	0.56	1.70	142.6	1.83	161.0	28	32	92	35		
1.98	6.5	90.10	1.16	Sand to Silty Sand	SP/SM	medium dense	100	5.4	17	0.335	0.335	1.17	0.56	1.70	144.8	1.84	164.1	28	33	92	36		
2.13	7.0	68.07	1.12	Sand to Silty Sand	SP/SM	medium dense	100	5.2	13	0.360	0.360	1.13	0.58	1.70	109.4	1.92	131.6	22	26	81	34		
2.29	7.5	31.50	2.68	Sandy Silt to Clayey Silt	ML	medium dense	110	4.3	7	0.386	0.386	2.71	0.73	1.70	50.8	2.42	120.9	12	24	49	31		
2.44	8.0	13.73	4.12	Clay	CL/CH	stiff	110	3.5	4	0.414	0.414	4.25	0.86	1.70	22.1	2.82					0.78	9.7	
2.59	8.5	12.93	4.27	Clay	CL/CH	stiff	110	3.4	4	0.441	0.441	4.42	0.87	1.70	20.8	2.85					0.73	8.5	
2.74	9.0	7.47	4.32	Clay	CL/CH	firm	110	3.0	2	0.469	0.469	4.61	0.93	1.70	12.0	3.04					0.41	4.5	
2.90	9.5	7.90	4.40	Clay	CL/CH	firm	110	3.1	3	0.496	0.496	4.69	0.92	1.70	12.7	3.03					0.44	4.5	
3.05	10.0	10.17	3.93	Clay	CL/CH	stiff	110	3.3	3	0.524	0.524	4.14	0.89	1.70	16.3	2.91					0.57	5.5	
3.20	10.5	14.47	3.78	Silty Clay to Clay	CL	stiff	110	3.6	4	0.551	0.551	3.93	0.85	1.70	23.2	2.78					0.82	7.6	
3.35	11.0	14.00	1.89	Clayey Silt to Silty Clay	MU/CL	stiff	120	3.9	4	0.580	0.580	1.97	0.80	1.62	21.4	2.62					0.79	6.9	
3.51	11.5	51.33	1.16	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.9	10	0.610	0.610	1.17	0.63	1.42	68.8	2.08	97.7	13	20	61	31		
3.66	12.0	44.07	2.09	Sandy Silt to Clayey Silt	ML	medium dense	120	4.5	10	0.640	0.640	2.12	0.70	1.42	59.2	2.30	114.7	12	23	55	31		
3.81	12.5	22.57	3.59	Clayey Silt to Silty Clay	MU/CL	very stiff	120	3.8	6	0.670	0.670	3.70	0.81	1.45	30.9	2.67					1.29	9.8	
3.96	13.0	20.80	5.38	Clay	CL/CH	very stiff	120	3.5	6	0.700	0.700	5.57	0.86	1.43	28.0	2.82					1.16	8.6	
4.11	13.5	16.43	6.07	Clay	CL/CH	stiff	120	3.2	5	0.730	0.730	6.35	0.89	1.39	21.6	2.94					0.92	6.5	
4.27	14.0	14.13	4.49	Clay	CL/CH	stiff	120	3.3	4	0.760	0.760	4.74	0.89	1.34	17.9	2.92					0.79	5.3	
4.42	14.5	31.60	4.40	Silty Clay to Clay	CL	very stiff	120	3.8	8	0.790	0.774	4.51	0.81	1.29	38.4	2.66					1.81	11.9	
4.57	15.0	32.87	5.18	Clay	CL/CH	very stiff	120	3.7	9	0.820	0.789	5.31	0.82	1.27	39.5	2.70					1.89	12.2	
4.72	15.5	46.07	3.14	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	11	0.850	0.803	3.20	0.75	1.23	53.5	2.45	135.6	12	27	51	31		
4.88	16.0	55.40	1.92	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	12	0.880	0.818	1.85	0.68	1.19	62.4	2.24	110.4	13	22	57	31		
5.03	16.5	12.87	5.10	Clay	CL/CH	stiff	120	3.1	4	0.910	0.832	5.48	0.92	1.25	15.2	3.01					0.71	4.3	
5.18	17.0	6.90	3.14	Clay	CL/CH	firm	120	2.9	2	0.940	0.846	3.63	0.96	1.24	8.1	3.12					0.36	2.1	
5.33	17.5	7.20	2.87	Silty Clay to Clay	CL	firm	120	3.0	2	0.970	0.861	3.32	0.95	1.22	8.3	3.09					0.37	2.2	
5.49	18.0	7.63	2.84	Silty Clay to Clay	CL	firm	120	3.0	3	1.000	0.875	3.27	0.94	1.20	8.6	3.07					0.40	2.3	
5.64	18.5	8.07	2.62	Silty Clay to Clay	CL	firm	120	3.1	3	1.030	0.890	3.00	0.93	1.18	9.0	3.04					0.42	2.4	
5.79	19.0	22.77	4.11	Silty Clay to Clay	CL	very stiff	120	3.5	6	1.060	0.904	4.31	0.85	1.14	24.6	2.79					1.29	7.2	
5.94	19.5	64.43	2.74	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	15	1.090	0.918	2.79	0.71	1.11	67.3	2.34	140.1	15	28	60	32		
6.10	20.0	51.27	4.27	Clayey Silt to Silty Clay	MU/CL	medium dense	120	4.0	13	1.120	0.933	4.36	0.77	1.10	53.4	2.55	161.6	13	32	51	31		
6.25	20.5	32.10	7.20	Clay	CL/CH	very stiff	120	3.4	9	1.150	0.947	7.46	0.87	1.10	33.4	2.86					1.83	9.8	
6.40	21.0	31.90	6.58	Clay	CL/CH	very stiff	120	3.4	9	1.180	0.962	6.83	0.86	1.09	32.7	2.84					1.82	9.6	
6.55	21.5	59.37	3.91	Clayey Silt to Silty Clay	MU/CL	medium dense	120	4.1	14	1.210	0.976	3.99	0.76	1.06	59.6	2.49	161.4	15	32	55	32		
6.71	22.0	94.63	2.30	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	20	1.240	0.990	2.33	0.66	1.04	93.5	2.18	152.1	20	30	74	33		
6.86	22.5	87.03	2.42	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.6	19	1.270	1.005	2.45	0.68	1.04	85.2	2.23	148.0	19	30	70	33		
7.01	23.0	62.87	3.12	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	15	1.300	1.019	3.19	0.73	1.03	61.1	2.41	143.6	15	29	56	32		
7.16	23.5	125.57	2.33	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.9	26	1.330	1.034	2.36	0.64	1.02	120.5	2.11	178.2	25	36	85	35		
7.32	24.0	243.07	1.04	Sand	SP	dense	120	5.7	42	1.360	1.048	1.04	0.51	1.00	230.8	1.66	233.3	41	47	100	39		
7.47	24.5	220.93	1.22	Sand	SP	dense	120	5.6	40	1.390	1.062	1.23	0.53	1.00	208.4	1.74	222.4	38	44	100	38		
7.62	25.0	213.37	1.19	Sand	SP	dense	120	5.6	38	1.420	1.077	1.20	0.53	0.99	199.8	1.75	213.7	37	43	100	38		
7.77	25.5	208.30	1.00	Sand	SP	dense	120	5.7	37	1.450	1.091	1.01	0.52	0.98	193.7	1.70	201.3	35	40	100	37		
7.92	26.0	191.13	1.24	Sand	SP	dense	120	5.5	35	1.480	1.106	1.25	0.55	0.98	176.3	1.80	195.0	33	39	100	37		
8.08	26.5	135.40	1.83	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.0	27	1.510	1.120	1.85	0.62	0.97	123.6	2.03	165.4	25	33	86	35		
8.23	27.0	31.17	3.92	Clayey Silt to Silty Clay	MU/CL	very stiff	120	3.6	9	1.540	1.134	4.12	0.83	0.94	27.8	2.73					1.77	7.8	
8.38	27.5	40.63	3.46	Clayey Silt to Silty Clay	MU/CL	hard	120	3.9	10	1.570	1.149	3.60	0.79	0.94	36.0	2.61					2.32	10.2	
8.53	28.0	204.40	0.81	Sand	SP	dense	120	5.8	35	1.600	1.163	0.82	0.50	0.95	184.2	1.65	185.3	33	37	100	37		
8.69	28.5	257.57	0.83	Sand	SP	dense	120	5.9	44	1.630	1.178	0.83	0.50	0.95	230.8	1.59	230.8	40	46	100	39		
8.84	29.0	257.83	0.87	Sand	SP	dense	120	5.9	44	1.660	1.192	0.87	0.50	0.94	229.6	1.61	229.6	40	46	100	39		
8.99	29.5	239.30	0.96	Sand	SP	dense	120	5.7	42	1.690	1.206	0.97	0.51	0.94	211.6	1.66	214.1	38	43	100	38		
9.14	30.0	239.50	0.93	Sand	SP	dense	120	5.8	42	1.720	1.221	0.93	0.50	0.93	210.6	1.65	211.7	38	42	100	38		
9.30	30.5	257.87	0.68	Sand</																			

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-6				Plot: 6		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest															
Est. GWT (feet) 14.0						Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4 SPT N									
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc to N	SPT N(60)	Total tsf	p'o tsf	F	n	Cq	Norm: Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dr (%)	Phi (deg)	Nk: Su (tsf)	OCR	
11.73	38.5	127.57	0.81	Sand	SP	medium dense	120	5.4	24	2.230	1.466	0.82	0.57	0.83	100.2	1.86	115.3	20	23	77	33		
11.89	39.0	38.93	5.63	Clay	CL/CH	hard	120	3.4	11	2.260	1.480	5.98	0.87	0.75	27.5	2.85		11				2.20	7.4
12.04	39.5	25.63	3.67	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.4	8	2.290	1.494	4.03	0.88	0.74	17.9	2.87		8				1.42	4.7
12.19	40.0	18.90	4.01	Silty Clay to Clay	CL	very stiff	120	3.1	6	2.320	1.509	4.58	0.92	0.72	12.9	3.02		6				1.02	3.3
12.34	40.5	10.67	3.99	Clay	CL/CH	stiff	120	2.6	4	2.350	1.523	5.11	1.00	0.69	7.0	3.26		4				0.54	1.6
12.50	41.0	49.37	2.04	Sandy Silt to Clayey Silt	ML	loose	120	4.2	12	2.380	1.538	2.14	0.75	0.75	35.2	2.47		92.4	10	18	34	30	
12.65	41.5	81.90	2.38	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.4	19	2.410	1.552	2.45	0.71	0.76	58.9	2.34		123.0	15	25	55	32	
12.80	42.0	244.80	0.50	Sand	SP	dense	120	6.0	40	2.440	1.566	0.51	0.50	0.82	190.2	1.51		190.2	32	38	100	37	
12.95	42.5	293.63	0.51	Gravelly Sand to Sand	SW	dense	120	6.2	48	2.470	1.581	0.52	0.50	0.82	227.1	1.45		227.1	38	45	100	38	
13.11	43.0	289.80	0.55	Gravelly Sand to Sand	SW	dense	120	6.1	47	2.500	1.595	0.56	0.50	0.81	222.9	1.48		222.9	38	45	100	38	
13.26	43.5	281.63	0.52	Gravelly Sand to Sand	SW	dense	120	6.1	46	2.530	1.610	0.52	0.50	0.81	215.8	1.47		215.8	36	43	100	38	
13.41	44.0	287.87	0.47	Gravelly Sand to Sand	SW	dense	120	6.2	47	2.560	1.624	0.48	0.50	0.81	219.6	1.44		219.6	37	44	100	38	
13.56	44.5	320.83	0.33	Gravelly Sand to Sand	SW	dense	120	6.4	50	2.590	1.638	0.33	0.50	0.80	243.7	1.31		243.7	39	49	100	38	
13.72	45.0	291.77	0.32	Gravelly Sand to Sand	SW	dense	120	6.4	46	2.620	1.653	0.32	0.50	0.80	220.6	1.34		220.6	36	44	100	37	
13.87	45.5	280.33	0.38	Gravelly Sand to Sand	SW	dense	120	6.3	45	2.650	1.667	0.39	0.50	0.80	211.1	1.40		211.1	35	42	100	37	
14.02	46.0	324.70	0.41	Gravelly Sand to Sand	SW	dense	120	6.3	51	2.680	1.682	0.41	0.50	0.79	243.4	1.37		243.4	40	49	100	38	
14.17	46.5	321.53	0.48	Gravelly Sand to Sand	SW	dense	120	6.2	52	2.710	1.696	0.48	0.50	0.79	240.0	1.41		240.0	40	48	100	38	
14.33	47.0	312.20	0.76	Sand	SP	dense	120	5.9	53	2.740	1.710	0.76	0.50	0.79	232.1	1.56		232.1	40	46	100	39	
14.48	47.5	302.83	1.03	Sand	SP	dense	120	5.7	53	2.770	1.725	1.04	0.51	0.78	223.1	1.67		223.1	40	45	100	39	
14.63	48.0	309.07	1.15	Sand	SP	dense	120	5.7	55	2.800	1.739	1.16	0.52	0.77	225.6	1.70		225.6	41	47	100	39	
14.78	48.5	359.83	0.93	Sand	SP	dense	120	5.9	61	2.830	1.754	0.94	0.50	0.78	264.2	1.59		264.2	46	53	100	40	
14.94	49.0	413.13	0.59	Gravelly Sand to Sand	SW	dense	120	6.3	66	2.860	1.768	0.59	0.50	0.77	302.1	1.40		302.1	50	60	100	41	
15.09	49.5	405.53	0.58	Gravelly Sand to Sand	SW	dense	120	6.2	65	2.890	1.782	0.58	0.50	0.77	295.3	1.40		295.3	49	59	100	40	
15.24	50.0	396.07	0.69	Gravelly Sand to Sand	SW	dense	120	6.1	65	2.920	1.797	0.69	0.50	0.77	287.3	1.47		287.3	48	57	100	40	
15.39	50.5	439.83	0.46	Gravelly Sand to Sand	SW	very dense	120	6.4	68	2.950	1.811	0.46	0.50	0.76	317.7	1.31		317.7	51	64	100	41	
15.54	51.0	432.13	0.41	Gravelly Sand to Sand	SW	dense	120	6.5	67	2.980	1.826	0.41	0.50	0.76	310.9	1.29		310.9	49	62	100	40	
15.70	51.5	426.13	0.31	Gravelly Sand to Sand	SW	dense	120	6.6	64	3.010	1.840	0.32	0.50	0.76	305.4	1.22		305.4	48	61	100	40	
15.85	52.0	349.73	0.40	Gravelly Sand to Sand	SW	dense	120	6.3	55	3.040	1.854	0.41	0.50	0.76	249.7	1.35		249.7	40	50	100	39	
16.00	52.5	279.20	0.59	Gravelly Sand to Sand	SW	dense	120	6.0	47	3.070	1.869	0.60	0.50	0.75	198.6	1.54		198.6	34	40	100	37	
16.15	53.0	305.90	0.51	Gravelly Sand to Sand	SW	dense	120	6.1	50	3.100	1.883	0.51	0.50	0.75	216.7	1.47		216.7	36	43	100	38	
16.31	53.5	310.20	0.50	Gravelly Sand to Sand	SW	dense	120	6.1	50	3.130	1.898	0.50	0.50	0.75	218.9	1.46		218.9	37	44	100	38	
16.46	54.0	326.83	0.58	Gravelly Sand to Sand	SW	dense	120	6.1	54	3.160	1.912	0.58	0.50	0.74	229.8	1.48		229.8	39	46	100	38	
16.61	54.5	348.37	0.64	Gravelly Sand to Sand	SW	dense	120	6.1	57	3.190	1.926	0.65	0.50	0.74	244.0	1.50		244.0	41	49	100	39	
16.76	55.0	352.67	0.61	Gravelly Sand to Sand	SW	dense	120	6.1	58	3.220	1.941	0.61	0.50	0.74	246.1	1.48		246.1	41	49	100	39	
16.92	55.5	359.27	0.61	Gravelly Sand to Sand	SW	dense	120	6.1	59	3.250	1.955	0.62	0.50	0.74	249.8	1.47		249.8	42	50	100	39	
17.07	56.0	373.70	0.63	Gravelly Sand to Sand	SW	dense	120	6.1	61	3.280	1.970	0.63	0.50	0.73	258.9	1.47		258.9	44	52	100	39	
17.22	56.5	391.37	0.52	Gravelly Sand to Sand	SW	dense	120	6.3	63	3.310	1.984	0.52	0.50	0.73	270.1	1.40		270.1	44	54	100	39	
17.37	57.0	353.77	0.60	Gravelly Sand to Sand	SW	dense	120	6.1	58	3.340	1.998	0.60	0.50	0.73	243.3	1.47		243.3	41	49	100	39	
17.53	57.5	324.93	0.55	Gravelly Sand to Sand	SW	dense	120	6.1	53	3.370	2.013	0.55	0.50	0.73	222.7	1.48		222.7	38	45	100	38	
17.68	58.0	317.83	0.54	Gravelly Sand to Sand	SW	dense	120	6.1	52	3.400	2.027	0.55	0.50	0.72	217.0	1.49		217.0	37	43	100	38	
17.83	58.5	338.40	0.77	Gravelly Sand to Sand	SW	dense	120	5.9	57	3.430	2.042	0.78	0.50	0.72	230.3	1.57		230.3	40	46	100	38	
17.98	59.0	380.10	0.58	Gravelly Sand to Sand	SW	dense	120	6.2	62	3.460	2.056	0.58	0.50	0.72	257.7	1.45		257.7	43	52	100	39	
18.14	59.5	354.20	0.60	Gravelly Sand to Sand	SW	dense	120	6.1	58	3.490	2.070	0.61	0.50	0.71	239.3	1.48		239.3	40	48	100	39	
18.29	60.0	344.73	0.66	Gravelly Sand to Sand	SW	dense	120	6.0	57	3.520	2.085	0.66	0.50	0.71	232.1	1.52		232.1	40	46	100	38	
18.44	60.5	289.73	0.69	Gravelly Sand to Sand	SW	dense	120	5.9	49	3.550	2.099	0.70	0.50	0.71	194.4	1.59		194.4	34	39	100	37	
18.59	61.0	103.10	3.02	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	24	3.580	2.114	3.13	0.74	0.60	58.6	2.42		139.4	17	28	55	32	
18.75	61.5	118.37	3.31	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	28	3.610	2.128	3.41	0.73	0.60	67.1	2.40		155.9	19	31	60	33	
18.90	62.0	298.10	0.73	Sand	SP	dense	120	5.9	51	3.640	2.142	0.74	0.50	0.70	198.0	1.60		198.0	35	40	100	37	
19.05	62.5	336.47	0.68	Gravelly Sand to Sand	SW	dense	120	6.0	56	3.670	2.157	0.69	0.50	0.70	222.7	1.54		222.7	38	45	100	38	
19.20	63.0	342.80	0.61	Gravelly Sand to Sand	SW	dense	120	6.0	57	3.700	2.171	0.62	0.50	0.70	226.2	1.51		226.2	38	45	100	38	
19.35	63.5	364.07	0.55	Gravelly Sand to Sand	SW	dense	120	6.1	59	3.730	2.186	0.56	0.50	0.70	239.4	1.46		239.4	40	48	100	38	
19.51	64.0	449.87	0.62	Gravelly Sand to Sand	SW	dense	120	6.2	73	3.760	2.200	0.63	0.50	0.69	294.9	1.43		294.9	49	59	100	40	
19.66	64.5	457.37	0.66	Gravelly Sand to Sand	SW	dense	120	6.2	74	3.790	2.214	0.67	0.50	0.69	298.8	1.44		298.8	50	60	100	41	

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-7		Plot: 7		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																	
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies		Phi Correlation: 4		SPT N											
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dens. Dr (%)	Phi (deg.)	Su (tsf)	Nk: 17	OCR
0.15	0.5	21.87	0.76	Silty Sand to Sandy Silt	SM/ML	loose	110	4.7	5	0.014	0.014	0.76	0.67	1.70	35.1	2.22	60.1	8	12	33	29		
0.30	1.0	42.13	1.05	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	8	0.041	0.041	1.05	0.62	1.70	87.7	2.06	93.4	14	19	61	31		
0.46	1.5	79.33	1.22	Sand to Silty Sand	SP/SM	medium dense	100	5.3	15	0.068	0.068	1.22	0.57	1.70	127.5	1.89	150.2	25	30	87	35		
0.61	2.0	67.93	1.45	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	13	0.094	0.094	1.46	0.61	1.70	109.2	1.99	140.6	23	28	80	34		
0.76	2.5	36.83	1.78	Sandy Silt to Clayey Silt	ML	medium dense	110	4.6	8	0.121	0.121	1.78	0.88	1.70	59.2	2.25	105.9	14	21	55	31		
0.91	3.0	31.70	1.16	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	7	0.149	0.149	1.16	0.66	1.70	50.9	2.18	82.6	11	17	49	30		
1.07	3.5	30.30	1.74	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	7	0.176	0.176	1.75	0.70	1.70	48.7	2.31	95.8	11	19	47	30		
1.22	4.0	22.67	4.98	Clay	CL/CH	very stiff	110	3.7	6	0.204	0.204	5.03	0.82	1.70	36.4	2.71		6				1.32	33.1
1.37	4.5	21.87	3.84	Silty Clay to Clay	CL	very stiff	110	3.8	6	0.231	0.231	3.88	0.80	1.70	35.1	2.64		6				1.27	28.1
1.52	5.0	21.50	4.75	Clay	CL/CH	very stiff	110	3.7	6	0.259	0.259	4.80	0.82	1.70	34.5	2.71		6				1.25	24.6
1.68	5.5	35.03	3.91	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.1	9	0.286	0.286	3.94	0.76	1.70	56.3	2.50	156.0	15	31	53	32		
1.83	6.0	64.07	1.68	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	13	0.314	0.314	1.69	0.62	1.70	102.9	2.05	141.7	22	28	78	34		
1.98	6.5	64.73	1.77	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	13	0.341	0.341	1.78	0.63	1.70	104.0	2.07	145.6	22	29	78	34		
2.13	7.0	37.57	3.58	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	9	0.369	0.369	3.62	0.74	1.70	60.4	2.45	153.3	15	31	56	32		
2.29	7.5	55.57	2.17	Sandy Silt to Clayey Silt	ML	medium dense	110	4.7	12	0.396	0.396	2.18	0.66	1.70	89.3	2.18	143.9	19	29	72	33		
2.44	8.0	24.37	3.90	Silty Clay to Clay	CL	very stiff	110	3.9	6	0.424	0.424	3.97	0.79	1.70	39.2	2.61		6				1.41	17.0
2.59	8.5	16.13	3.56	Silty Clay to Clay	CL	stiff	110	3.7	4	0.451	0.451	3.67	0.83	1.70	25.9	2.72		4				0.92	10.4
2.74	9.0	29.93	4.05	Silty Clay to Clay	CL	medium dense	110	4.0	8	0.479	0.479	4.11	0.78	1.70	48.1	2.56	149.0	11	30	46	30		
2.90	9.5	39.57	3.90	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	9	0.506	0.506	3.95	0.75	1.70	63.6	2.47	165.2	13	33	58	31		
3.05	10.0	26.63	4.20	Silty Clay to Clay	CL	very stiff	110	3.9	7	0.534	0.534	4.29	0.79	1.70	42.8	2.61		7				1.54	14.7
3.20	10.5	17.97	3.08	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.8	5	0.561	0.561	3.18	0.81	1.67	28.3	2.65		5				1.02	9.3
3.35	11.0	40.77	1.37	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.7	9	0.590	0.590	1.39	0.67	1.48	56.9	2.19	93.6	11	19	53	30		
3.51	11.5	71.83	1.24	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.1	14	0.620	0.620	1.25	0.61	1.38	94.0	1.99	121.5	18	24	74	33		
3.66	12.0	70.97	1.71	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.9	15	0.650	0.650	1.73	0.64	1.37	91.6	2.10	132.8	18	27	73	33		
3.81	12.5	26.77	4.03	Silty Clay to Clay	CL	very stiff	120	3.8	7	0.680	0.680	4.14	0.81	1.43	36.1	2.65		7				1.53	11.5
3.96	13.0	28.50	3.52	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.9	7	0.710	0.710	3.61	0.79	1.37	36.9	2.60		7				1.63	11.7
4.11	13.5	13.50	5.74	Clay	CL/CH	stiff	120	3.1	4	0.740	0.740	6.07	0.91	1.39	17.7	2.99		4				0.75	5.2
4.27	14.0	20.63	4.59	Clay	CL/CH	very stiff	120	3.5	6	0.770	0.770	4.77	0.85	1.31	25.6	2.80		6				1.17	7.7
4.42	14.5	21.57	5.62	Clay	CL/CH	very stiff	120	3.4	6	0.800	0.784	5.84	0.87	1.30	26.4	2.85		6				1.22	7.9



CPT No: CPT-8

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

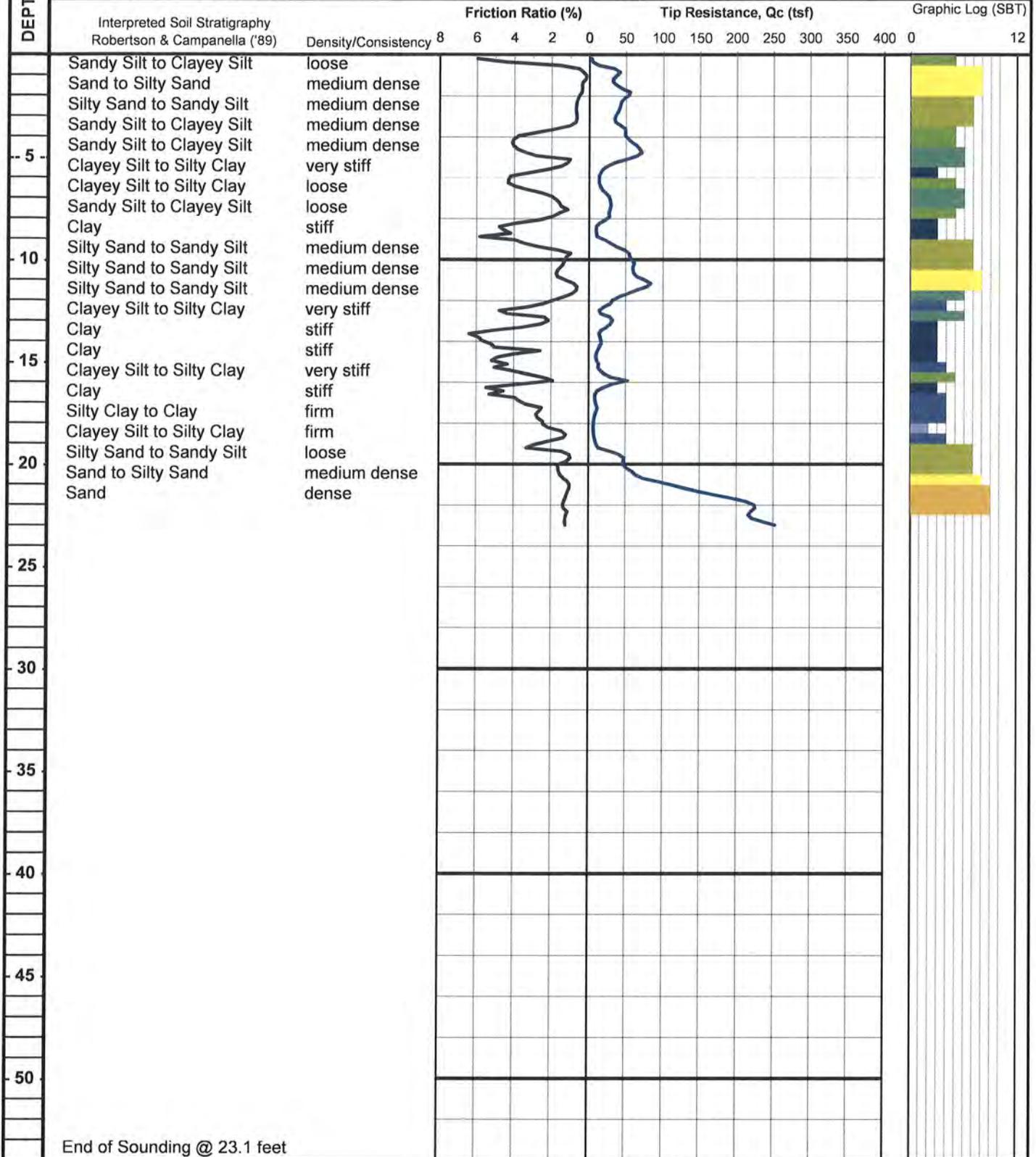
Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-8		Plot: 8		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE; Earth Systems Southwest																
Est. GWT (feet): 14.0		Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies					Phi Correlation: 4 SPT N											
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dens. Dr (%)	Phi (deg.)	Nk: 17 Su (tsf)	OCR
0.15	0.5	16.87	2.17	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	4	0.014	0.014	2.17	0.78	1.70	27.1	2.56	84.4	7	17	23	29	
0.30	1.0	36.83	0.23	Sand to Silty Sand	SP/SM	medium dense	100	5.5	7	0.040	0.040	0.23	0.55	1.70	59.2	1.79	59.2	11	12	55	30	
0.46	1.5	37.83	0.38	Sand to Silty Sand	SP/SM	medium dense	100	5.3	7	0.065	0.065	0.38	0.57	1.70	60.8	1.87	60.8	12	12	56	31	
0.61	2.0	51.53	0.52	Sand to Silty Sand	SP/SM	medium dense	100	5.4	9	0.090	0.090	0.52	0.55	1.70	82.8	1.81	92.5	16	19	69	32	
0.76	2.5	41.67	0.70	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	8	0.116	0.116	0.70	0.60	1.70	67.0	1.96	83.6	14	17	60	31	
0.91	3.0	35.93	0.69	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	7	0.144	0.144	0.69	0.61	1.70	57.7	2.01	75.8	12	15	54	31	
1.07	3.5	42.10	1.19	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	9	0.171	0.171	1.19	0.64	1.70	67.6	2.09	97.3	15	19	61	32	
1.22	4.0	50.13	3.54	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.4	11	0.199	0.199	3.55	0.72	1.70	80.6	2.36	174.4	19	35	68	33	
1.37	4.5	63.63	3.99	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.4	14	0.226	0.226	4.00	0.71	1.70	102.2	2.34	211.4	24	42	78	35	
1.52	5.0	61.87	2.39	Sandy Silt to Clayey Silt	ML	medium dense	110	4.7	13	0.254	0.254	2.40	0.66	1.70	99.4	2.18	159.8	22	32	77	34	
1.68	5.5	23.33	2.01	Sandy Silt to Clayey Silt	ML	loose	110	4.2	6	0.281	0.281	2.03	0.74	1.70	37.5	2.44	92.3	9	18	36	30	
1.83	6.0	13.27	4.27	Clay	CL/CH	stiff	110	3.4	4	0.309	0.309	4.37	0.86	1.70	21.3	2.84		4			0.76	12.6
1.98	6.5	18.00	3.30	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.8	5	0.336	0.336	3.36	0.81	1.70	28.9	2.66		5			1.04	15.8
2.13	7.0	27.77	1.80	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	6	0.364	0.364	1.82	0.71	1.70	44.6	2.35	94.0	10	19	43	30	
2.29	7.5	27.90	1.41	Sandy Silt to Clayey Silt	ML	loose	110	4.5	6	0.391	0.391	1.43	0.69	1.70	44.8	2.28	84.6	10	17	44	30	
2.44	8.0	21.10	2.83	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	5	0.419	0.419	2.89	0.78	1.70	33.9	2.57	106.0	8	21	32	29	
2.59	8.5	9.67	4.52	Clay	CL/CH	stiff	110	3.2	3	0.446	0.446	4.73	0.90	1.70	15.5	2.96		3			0.54	6.2
2.74	9.0	20.10	4.43	Clay	CL/CH	very stiff	110	3.7	5	0.474	0.474	4.54	0.82	1.70	32.3	2.71		5			1.15	12.4
2.90	9.5	46.13	1.79	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	10	0.501	0.501	1.81	0.67	1.84	71.7	2.19	117.6	14	24	63	31	
3.05	10.0	58.20	1.29	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	12	0.529	0.529	1.30	0.62	1.54	84.6	2.04	114.6	16	23	70	32	
3.20	10.5	59.67	1.64	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.9	12	0.556	0.556	1.66	0.64	1.51	85.2	2.11	125.1	16	25	70	32	
3.35	11.0	74.37	1.25	Sand to Silty Sand	SP/SM	medium dense	120	5.1	14	0.585	0.585	1.26	0.60	1.43	100.4	1.98	127.5	19	25	77	33	
3.51	11.5	65.03	0.74	Sand to Silty Sand	SP/SM	medium dense	120	5.3	12	0.615	0.615	0.75	0.58	1.37	84.1	1.89	99.5	16	20	70	32	
3.66	12.0	33.53	1.89	Sandy Silt to Clayey Silt	ML	loose	120	4.4	8	0.645	0.645	1.93	0.72	1.43	45.2	2.36	97.2	10	19	44	30	
3.81	12.5	16.57	4.14	Silty Clay to Clay	CL	stiff	120	3.5	5	0.675	0.675	4.32	0.85	1.47	23.0	2.81		5			0.93	7.1
3.96	13.0	29.67	2.35	Sandy Silt to Clayey Silt	ML	loose	120	4.2	7	0.705	0.705	2.41	0.75	1.36	38.1	2.48	101.1	9	20	37	29	
4.11	13.5	17.87	5.01	Clay	CL/CH	very stiff	120	3.4	5	0.735	0.735	5.22	0.87	1.37	23.2	2.86		5			1.01	7.0
4.27	14.0	15.87	5.62	Clay	CL/CH	stiff	120	3.2	5	0.765	0.765	5.91	0.90	1.34	20.1	2.94		5			0.89	5.9
4.42	14.5	11.70	3.86	Clay	CL/CH	stiff	120	3.2	4	0.795	0.779	4.14	0.90	1.32	14.6	2.95		4			0.64	4.2
4.57	15.0	11.03	4.81	Clay	CL/CH	stiff	120	3.1	4	0.825	0.794	5.20	0.93	1.30	13.6	3.03		4			0.60	3.9
4.72	15.5	16.20	4.16	Silty Clay to Clay	CL	stiff	120	3.4	5	0.855	0.808	4.39	0.87	1.27	19.4	2.87		5			0.91	5.7
4.88	16.0	33.43	3.39	Clayey Silt to Silty Clay	ML/CL	loose	120	3.9	8	0.885	0.823	3.48	0.78	1.22	38.5	2.58	123.4	9	25	37	30	
5.03	16.5	9.20	4.61	Clay	CL/CH	firm	120	2.9	3	0.915	0.837	5.12	0.95	1.25	10.9	3.11		3			0.49	3.0
5.18	17.0	9.87	3.20	Silty Clay to Clay	CL	stiff	120	3.1	3	0.945	0.851	3.54	0.92	1.22	11.4	2.99		3			0.53	3.1
5.33	17.5	8.57	2.73	Silty Clay to Clay	CL	firm	120	3.1	3	0.975	0.866	3.08	0.92	1.20	9.7	3.01		3			0.45	2.6
5.49	18.0	6.27	2.34	Silty Clay to Clay	CL	firm	120	2.9	2	1.005	0.880	2.78	0.96	1.19	7.1	3.10		2			0.32	1.8
5.64	18.5	6.70	1.34	Sensitive fine-grained	ML	firm	120	3.2	2	1.035	0.895	1.59	0.91	1.17	7.4	2.96		2			0.34	1.9
5.79	19.0	10.50	2.77	Silty Clay to Clay	CL	stiff	120	3.2	3	1.065	0.909	3.09	0.91	1.15	11.4	2.96		3			0.56	3.1



CPT No: CPT-9

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017

DEPTH (FEET)

Interpreted Soil Stratigraphy
Robertson & Campanella ('89)

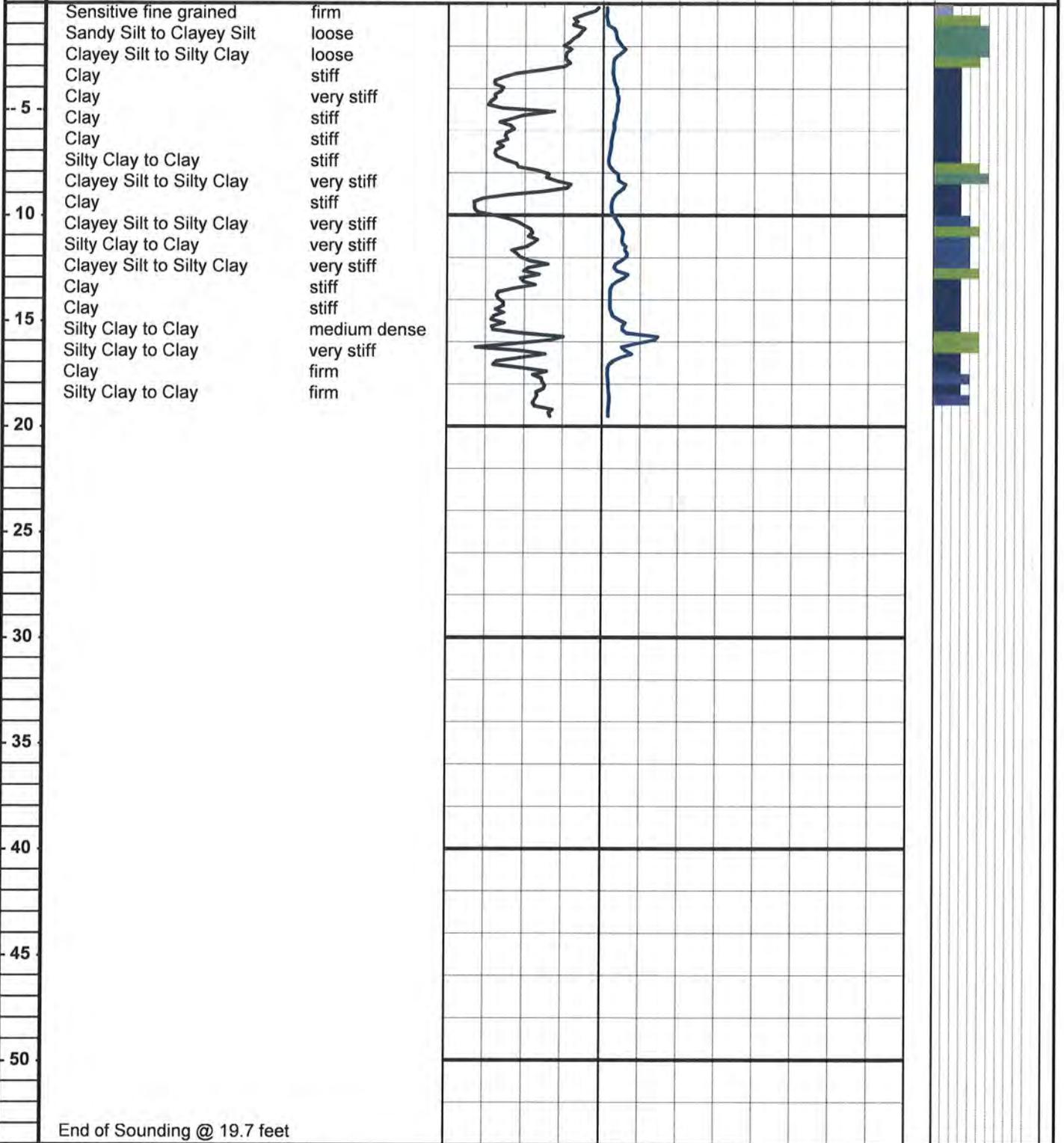
Density/Consistency

Friction Ratio (%)

Tip Resistance, Qc (tsf)

Graphic Log (SBT)

8 6 4 2 0 50 100 150 200 250 300 350 400 0 12



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-9		Plot: 9		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																	
Est. GWT (feet): 14.0		Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies					Phi Correlation: 4 SPT N												
Base Depth meters	Base Depth feet	Avg Tip Qc tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dr (%)	Phi (deg.)	Su (tsf)	Nk: 17	OCR
0.15	0.5	4.17	0.98	Sensitive fine grained	ML	soft	110	3.3	1	0.014	0.014	0.98	0.88	1.70	6.7	2.91						0.24	90.6
0.30	1.0	8.20	1.28	Clayey Silt to Silty Clay	ML/CL	firm	110	3.7	2	0.041	0.041	1.28	0.82	1.70	13.2	2.70						0.48	59.3
0.46	1.5	16.73	1.31	Sandy Silt to Clayey Silt	ML	loose	110	4.2	4	0.069	0.069	1.31	0.74	1.70	26.9	2.44	66.8	7	13	22	29		
0.61	2.0	24.47	1.79	Sandy Silt to Clayey Silt	ML	loose	110	4.3	6	0.096	0.096	1.80	0.72	1.70	39.3	2.39	88.7	10	18	38	30		
0.76	2.5	18.47	1.90	Sandy Silt to Clayey Silt	ML	loose	110	4.1	4	0.124	0.124	1.91	0.76	1.70	29.7	2.50	82.0	8	16	26	29		
0.91	3.0	12.70	2.24	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.6	3	0.151	0.151	2.26	0.81	1.70	20.4	2.67						0.74	24.9
1.07	3.5	13.07	5.05	Clay	CL/CH	stiff	110	3.3	4	0.179	0.179	5.12	0.88	1.70	21.0	2.89						0.76	21.6
1.22	4.0	16.80	5.33	Clay	CL/CH	stiff	110	3.5	5	0.206	0.206	5.40	0.86	1.70	27.0	2.82						0.98	24.1
1.37	4.5	19.23	5.63	Clay	CL/CH	very stiff	110	3.5	5	0.234	0.234	5.70	0.85	1.70	30.9	2.80						1.12	24.4
1.52	5.0	18.20	4.53	Clay	CL/CH	very stiff	110	3.6	5	0.261	0.261	4.60	0.83	1.70	29.2	2.75						1.06	20.6
1.68	5.5	15.38	4.70	Clay	CL/CH	stiff	110	3.5	4	0.289	0.289	4.79	0.85	1.70	24.7	2.82						0.89	15.7
1.83	6.0	13.07	4.86	Clay	CL/CH	stiff	110	3.4	4	0.316	0.316	4.98	0.87	1.70	21.0	2.88						0.75	12.1
1.98	6.5	10.73	5.16	Clay	CL/CH	stiff	110	3.2	3	0.344	0.344	5.33	0.90	1.70	17.2	2.96						0.61	9.1
2.13	7.0	8.77	5.51	Clay	CL/CH	firm	110	3.0	3	0.371	0.371	5.75	0.93	1.70	14.1	3.05						0.49	6.8
2.29	7.5	7.93	4.80	Clay	CL/CH	firm	110	3.1	3	0.399	0.399	4.85	0.92	1.70	12.7	3.04						0.44	5.7
2.44	8.0	17.47	2.98	Clayey Silt to Silty Clay	ML/CL	very stiff	110	3.8	5	0.426	0.426	3.06	0.80	1.70	28.1	2.64						1.00	12.0
2.59	8.5	25.80	1.95	Sandy Silt to Clayey Silt	ML	loose	110	4.3	6	0.454	0.454	1.98	0.73	1.70	41.5	2.38	94.9	9	19	40	30		
2.74	9.0	17.10	4.67	Clay	CL/CH	stiff	110	3.6	5	0.481	0.481	4.80	0.85	1.70	27.5	2.78						0.98	10.4
2.90	9.5	11.13	6.62	Clay	CL/CH	stiff	110	3.1	4	0.509	0.509	6.93	0.92	1.70	17.9	3.03						0.62	6.3
3.05	10.0	14.03	5.59	Clay	CL/CH	stiff	110	3.3	4	0.536	0.536	5.81	0.88	1.70	22.5	2.90						0.79	7.6
3.20	10.5	22.17	4.00	Silty Clay to Clay	CL	very stiff	110	3.8	6	0.564	0.564	4.10	0.81	1.66	34.9	2.68						1.27	11.5
3.35	11.0	25.63	3.59	Clayey Silt to Silty Clay	ML/CL	loose	120	3.9	7	0.593	0.593	3.67	0.79	1.58	38.3	2.60	126.8	9	25	37	29		
3.51	11.5	27.93	4.05	Silty Clay to Clay	CL	very stiff	120	3.9	7	0.623	0.623	4.14	0.80	1.53	40.3	2.62						1.61	13.2
3.66	12.0	29.00	4.13	Silty Clay to Clay	CL	very stiff	120	3.9	8	0.653	0.653	4.22	0.80	1.47	40.3	2.62						1.67	13.0
3.81	12.5	16.60	3.55	Silty Clay to Clay	CL	stiff	120	3.6	5	0.683	0.683	3.70	0.84	1.45	22.7	2.77						0.94	7.0
3.96	13.0	26.63	3.84	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	7	0.713	0.713	3.94	0.81	1.38	34.6	2.65						1.52	10.9
4.11	13.5	11.03	4.44	Clay	CL/CH	stiff	120	3.1	4	0.743	0.743	4.76	0.91	1.38	14.4	2.99						0.61	4.2
4.27	14.0	9.93	5.30	Clay	CL/CH	stiff	120	3.0	3	0.773	0.773	5.75	0.94	1.34	12.6	3.09						0.54	3.6
4.42	14.5	10.47	5.23	Clay	CL/CH	stiff	120	3.0	4	0.803	0.787	5.67	0.94	1.32	13.1	3.07						0.57	3.7
4.57	15.0	21.07	5.45	Clay	CL/CH	very stiff	120	3.4	6	0.833	0.801	5.68	0.87	1.27	25.4	2.86						1.19	7.6
4.72	15.5	27.80	5.15	Clay	CL/CH	very stiff	120	3.6	8	0.863	0.816	5.31	0.84	1.24	32.7	2.76						1.59	9.9
4.88	16.0	52.48	3.96	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.1	13	0.893	0.830	4.03	0.76	1.20	59.6	2.49	162.2	14	32	55	31		
5.03	16.5	30.77	3.74	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	8	0.923	0.845	3.86	0.80	1.20	34.9	2.64						1.76	10.6
5.18	17.0	9.87	5.04	Clay	CL/CH	stiff	120	2.9	3	0.953	0.859	5.58	0.95	1.22	11.4	3.11						0.53	3.1
5.33	17.5	6.67	3.16	Clay	CL/CH	firm	120	2.8	2	0.983	0.873	3.71	0.97	1.20	7.6	3.15						0.34	2.0
5.49	18.0	7.47	2.99	Silty Clay to Clay	CL	firm	120	2.9	3	1.013	0.888	3.46	0.95	1.18	8.3	3.10						0.39	2.2
5.64	18.5	8.67	3.38	Clay	CL/CH	firm	120	3.0	3	1.043	0.902	3.85	0.94	1.16	9.5	3.08						0.46	2.5
5.79	19.0	8.23	3.18	Silty Clay to Clay	CL	firm	120	3.0	3	1.073	0.917	3.86	0.95	1.15	8.9	3.08						0.43	2.3



CPT No : CPT-10

Cone Penetrometer: Kehoe Testing and Engineering

Project Name: Doris and Patterson

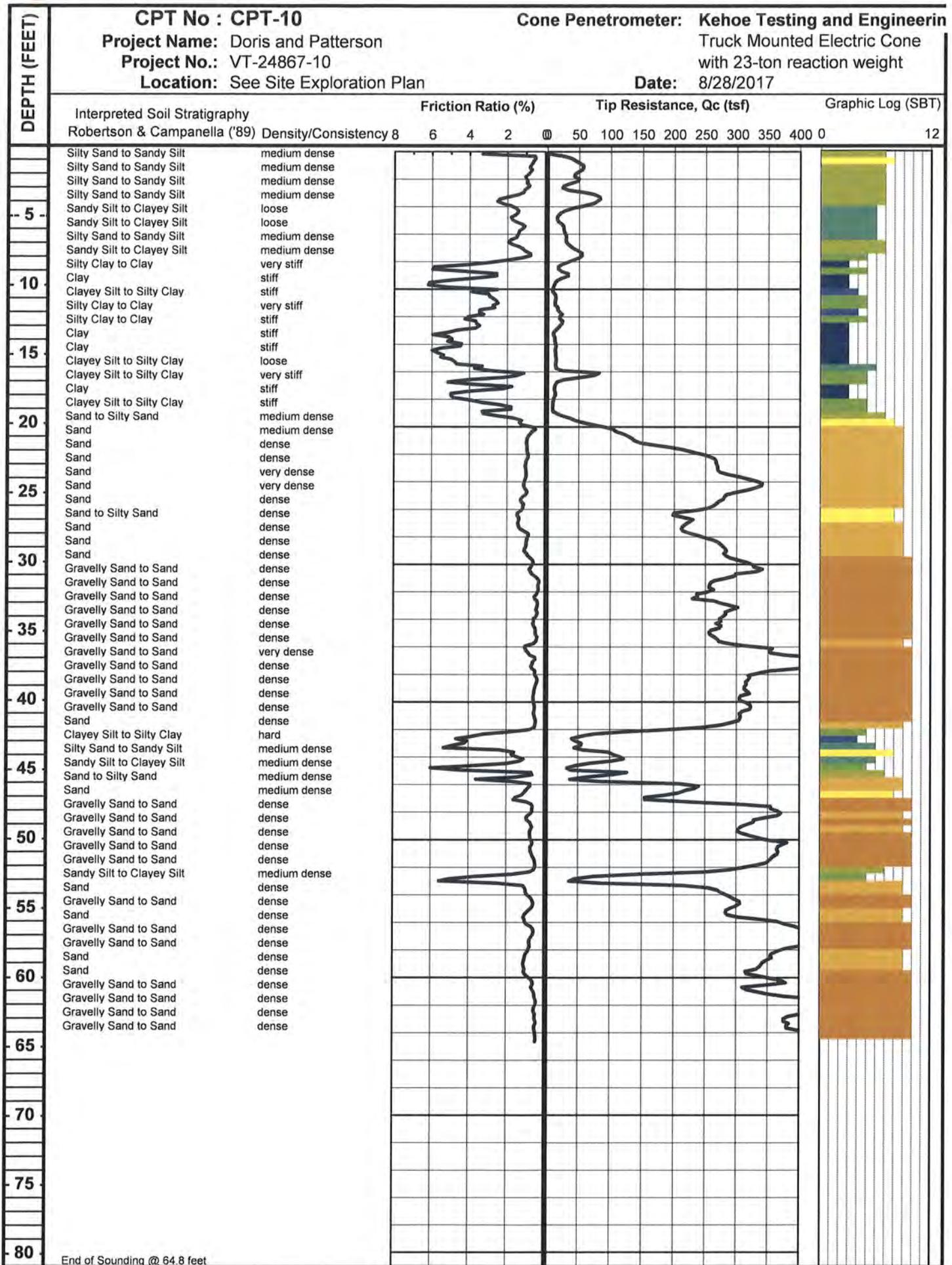
Truck Mounted Electric Cone

Project No.: VT-24867-10

with 23-ton reaction weight

Location: See Site Exploration Plan

Date: 8/28/2017



End of Sounding @ 64.8 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-10		Plot: 10		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																	
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jeffenes & Davies				Phi Correlation: 4 SPT N											
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dr (%)	Phi (deg.)	Su (tsf)	Nk: 17	OCR
0.15	0.5	35.43	0.57	Silty Sand to Silty Silt	SM/ML	medium dense	110	5.1	7	0.014	0.014	0.57	0.60	1.70	56.9	1.97	72.1	12	14	53	31		
0.30	1.0	54.00	0.76	Sand to Silty Sand	SP/SM	medium dense	100	5.3	10	0.040	0.040	0.76	0.57	1.70	86.8	1.89	102.1	17	20	71	32		
0.46	1.5	48.33	0.81	Silty Sand to Silty Silt	SM/ML	medium dense	110	5.2	9	0.066	0.066	0.81	0.59	1.70	77.7	1.94	95.5	16	19	66	32		
0.61	2.0	46.27	1.01	Silty Sand to Silty Silt	SM/ML	medium dense	110	5.1	9	0.094	0.094	1.01	0.61	1.70	74.3	2.01	98.1	16	20	65	32		
0.76	2.5	28.27	0.93	Silty Sand to Silty Silt	SM/ML	medium dense	110	4.8	6	0.121	0.121	0.93	0.66	1.70	45.4	2.17	72.3	10	14	44	30		
0.91	3.0	54.83	1.24	Silty Sand to Silty Silt	SM/ML	medium dense	110	5.1	11	0.149	0.149	1.24	0.61	1.70	88.1	2.01	116.0	18	23	72	33		
1.07	3.5	80.60	2.32	Silty Sand to Silty Silt	SM/ML	medium dense	110	4.9	16	0.176	0.176	2.32	0.63	1.70	129.5	2.09	185.6	28	37	88	35		
1.22	4.0	56.13	1.86	Silty Sand to Silty Silt	SM/ML	medium dense	110	4.8	12	0.204	0.204	1.87	0.65	1.70	90.2	2.13	135.7	20	27	73	33		
1.37	4.5	22.03	1.50	Sandy Silt to Clayey Silt	ML	loose	110	4.3	5	0.231	0.231	1.51	0.72	1.70	35.4	2.38	78.6	9	16	34	29		
1.52	5.0	15.30	1.73	Sandy Silt to Clayey Silt	ML	loose	110	4.0	4	0.259	0.259	1.76	0.77	1.70	24.6	2.54	73.7	6	15	19	29		
1.68	5.5	24.15	1.23	Sandy Silt to Clayey Silt	ML	loose	110	4.5	5	0.286	0.286	1.25	0.70	1.70	38.8	2.30	75.1	9	15	36	30		
1.83	6.0	28.23	1.47	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	6	0.314	0.314	1.49	0.70	1.70	45.4	2.29	86.5	11	17	44	30		
1.98	6.5	30.03	1.85	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	7	0.341	0.341	1.87	0.71	1.70	48.3	2.33	98.4	11	20	47	30		
2.13	7.0	42.50	1.22	Silty Sand to Silty Silt	SM/ML	medium dense	110	4.9	9	0.369	0.369	1.24	0.64	1.70	68.3	2.10	98.9	14	20	61	31		
2.29	7.5	52.50	0.95	Silty Sand to Silty Silt	SM/ML	medium dense	110	5.2	10	0.396	0.396	0.96	0.60	1.70	84.4	1.96	105.1	16	21	70	32		
2.44	8.0	30.87	3.02	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	7	0.424	0.424	3.06	0.75	1.70	49.6	2.46	128.1	11	26	48	30		
2.59	8.5	18.37	5.34	Clay	CL/CH	very stiff	110	3.5	5	0.451	0.451	5.47	0.85	1.70	29.5	2.80		5				1.05	11.9
2.74	9.0	29.00	2.99	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.1	7	0.479	0.479	3.04	0.75	1.70	46.6	2.48	124.2	10	25	45	30		
2.90	9.5	12.43	5.87	Clay	CL/CH	stiff	110	3.2	4	0.506	0.506	6.11	0.90	1.70	20.0	2.95		4				0.70	7.1
3.05	10.0	8.27	3.85	Clay	CL/CH	firm	110	3.2	3	0.534	0.534	4.11	0.91	1.70	13.3	2.98		3				0.45	4.3
3.20	10.5	12.27	2.91	Silty Clay to Clay	CL	stiff	110	3.6	3	0.561	0.561	3.05	0.84	1.70	19.7	2.78		3				0.69	6.3
3.35	11.0	11.77	2.63	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.6	3	0.590	0.590	2.77	0.84	1.64	18.2	2.77		3				0.66	5.7
3.51	11.5	16.90	3.22	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.7	5	0.620	0.620	3.34	0.83	1.55	24.8	2.71		5				0.96	7.9
3.66	12.0	20.43	3.87	Silty Clay to Clay	CL	very stiff	120	3.7	6	0.650	0.650	3.99	0.83	1.49	28.9	2.71		6				1.16	9.1
3.81	12.5	21.87	3.61	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.7	6	0.680	0.680	3.72	0.82	1.43	29.6	2.68		6				1.25	9.3
3.96	13.0	12.97	4.49	Clay	CL/CH	stiff	120	3.3	4	0.710	0.710	4.75	0.89	1.43	17.5	2.93		4				0.72	5.2
4.11	13.5	10.40	5.33	Clay	CL/CH	stiff	120	3.0	3	0.740	0.740	5.74	0.93	1.40	13.7	3.06		3				0.57	3.9
4.27	14.0	12.43	4.71	Clay	CL/CH	stiff	120	3.2	4	0.770	0.770	5.02	0.91	1.33	15.7	2.98		4				0.69	4.5
4.42	14.5	12.30	5.75	Clay	CL/CH	stiff	120	3.0	4	0.800	0.784	6.15	0.93	1.32	15.3	3.04		4				0.68	4.4
4.57	15.0	13.03	5.30	Clay	CL/CH	stiff	120	3.1	4	0.830	0.799	5.66	0.92	1.29	15.9	3.01		4				0.72	4.6
4.72	15.5	12.87	4.28	Clay	CL/CH	stiff	120	3.2	4	0.860	0.813	4.58	0.90	1.27	15.4	2.96		4				0.71	4.4
4.88	16.0	48.35	2.30	Sandy Silt to Clayey Silt	ML	medium dense	120	4.4	11	0.890	0.828	2.34	0.72	1.19	54.5	2.35	116.0	12	23	52	31		
5.03	16.5	30.60	3.84	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.8	8	0.920	0.842	3.95	0.81	1.20	34.8	2.65		8				1.75	10.6
5.18	17.0	11.57	2.61	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.4	3	0.950	0.856	2.84	0.88	1.20	13.2	2.89		3				0.63	3.7
5.33	17.5	11.87	4.64	Clay	CL/CH	stiff	120	3.1	4	0.980	0.871	5.06	0.93	1.20	13.4	3.03		4				0.65	3.8
5.48	18.0	9.43	4.06	Clay	CL/CH	stiff	120	3.0	3	1.010	0.885	4.55	0.94	1.18	10.5	3.08		3				0.50	2.9
5.64	18.5	8.33	2.04	Clayey Silt to Silty Clay	ML/CL	firm	120	3.2	3	1.040	0.900	2.33	0.91	1.16	9.1	2.97		3				0.44	2.4
5.79	19.0	15.90	3.04	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.5	5	1.070	0.914	3.26	0.86	1.13	17.1	2.83		5				0.88	4.9
5.94	19.5	45.03	1.41	Silty Sand to Silty Silt	SM/ML	medium dense	120	4.6	10	1.100	0.928	1.45	0.69	1.09	46.8	2.27	86.4	10	17	45	30		
6.10	20.0	88.83	0.79	Sand to Silty Sand	SP/SM	medium dense	120	5.3	17	1.130	0.943	0.80	0.58	1.07	89.7	1.89	105.6	17	21	72	32		
6.25	20.5	117.77	0.78	Sand	SP	medium dense	120	5.5	21	1.160	0.957	0.79	0.55	1.06	117.6	1.79	129.3	22	26	84	34		
6.40	21.0	138.43	0.96	Sand	SP	medium dense	120	5.5	25	1.190	0.972	0.97	0.55	1.05	137.1	1.80	151.5	26	30	90	35		
6.55	21.5	191.77	0.95	Sand	SP	dense	120	5.7	34	1.220	0.986	0.96	0.52	1.04	188.0	1.69	194.4	34	39	100	37		
6.71	22.0	241.80	0.91	Sand	SP	dense	120	5.8	41	1.250	1.000	0.91	0.50	1.03	235.0	1.61	235.0	41	47	100	39		
6.86	22.5	265.67	0.98	Sand	SP	dense	120	5.8	45	1.280	1.015	0.98	0.50	1.02	256.4	1.61	256.4	45	51	100	40		
7.01	23.0	268.77	1.03	Sand	SP	dense	120	5.8	46	1.310	1.029	1.03	0.50	1.01	257.6	1.63	257.6	46	52	100	40		
7.16	23.5	286.93	1.00	Sand	SP	dense	120	5.9	49	1.340	1.044	1.00	0.50	1.01	273.1	1.60	273.1	48	55	100	40		
7.32	24.0	329.80	1.08	Sand	SP	very dense	120	5.9	56	1.370	1.058	1.08	0.50	1.00	311.7	1.59	311.7	54	62	100	41		
7.47	24.5	326.77	1.06	Sand	SP	very dense	120	5.9	55	1.400	1.072	1.06	0.50	0.99	306.8	1.59	306.8	54	61	100	41		
7.62	25.0	286.63	1.06	Sand	SP	dense	120	5.8	49	1.430	1.087	1.06	0.50	0.99	267.3	1.63	267.3	47	53	100	40		
7.77	25.5	271.70	1.22	Sand	SP	dense	120	5.7	48	1.460	1.101	1.22	0.52	0.98	251.6	1.69	259.2	45	52	100	40		
7.92	26.0	248.80	1.19	Sand	SP	dense	120	5.7	44	1.490	1.116	1.20	0.52	0.97	228.8	1.71	238.9	42	48	100	39		
8.08	26.5	210.63	1.41	Sand to Silty Sand	SP/SM	dense	120	5.4	39	1.520	1.130	1.42	0.55	0.96	192.0	1.81	214.5	36	43	100	38		
8.23	27.0	218.37	1.40	Sand to Silty Sand	SP/SM	dense	120	5.5	40	1.550	1.144	1.41	0.55	0.96	197.7	1.80	219.3	37	44	100	38		
8.38	27.5	216.27	1.11	Sand	SP	dense	120	5.6	39	1.580	1.159	1.12	0.53	0.95	194.8	1.73	206.4	36	41	100	38		
8.53	28.0	248.87	0.91	Sand	SP	dense	120	5.8	43	1.610	1.173	0.92	0.50	0.95	223.4	1.63	223.4	40	45	100	38		
8.69	28.5	274.07	0.99	Sand	SP	dense	120	5.8	47	1.640	1.188	0.99	0.50	0.94	244.5	1.63	244.5	43	49	100	39		
8.84	29.0	281.20	1.04	Sand	SP	dense	120	5.8	49	1.670	1.202	1.04	0.50	0.94	249.4	1.64	249.4	44	50	100	39		
8.99	29.5	291.60	0.76	Sand	SP	dense	120	6.0	49	1.700	1.216	0.77	0.50	0.93	257.0	1.53	257.0	44	51	100	39		
9.14	30.0																						

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-10		Plot: 10		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																
Est. GWT (feet): 14.0		Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies					Phi Correlation: 4			SPT N								
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est Density (pcf)	Qc N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dens Dr (%)	Phi (deg.)	Nk Su (tsf)	OCR
11.73	38.5	315.83	0.40	Gravelly Sand to Sand	SW	dense	120	6.4	50	2,240	1,476	0.40	0.50	0.85	252.8	1.35	252.8	41	51	100	39	
11.89	39.0	313.37	0.52	Gravelly Sand to Sand	SW	dense	120	6.2	50	2,270	1,490	0.52	0.50	0.84	249.6	1.42	249.6	41	50	100	39	
12.04	39.5	310.43	0.58	Gravelly Sand to Sand	SW	dense	120	6.1	51	2,300	1,504	0.58	0.50	0.84	246.1	1.46	246.1	41	49	100	39	
12.19	40.0	313.57	0.56	Gravelly Sand to Sand	SW	dense	120	6.2	51	2,330	1,519	0.56	0.50	0.83	247.4	1.45	247.4	41	49	100	39	
12.34	40.5	317.23	0.53	Gravelly Sand to Sand	SW	dense	120	6.2	51	2,360	1,533	0.53	0.50	0.83	249.1	1.43	249.1	41	50	100	39	
12.50	41.0	305.07	0.53	Gravelly Sand to Sand	SW	dense	120	6.2	49	2,390	1,548	0.54	0.50	0.83	238.4	1.45	238.4	40	48	100	38	
12.65	41.5	289.17	0.47	Gravelly Sand to Sand	SW	dense	120	6.2	47	2,420	1,562	0.47	0.50	0.82	224.9	1.43	224.9	37	45	100	38	
12.80	42.0	185.67	1.04	Sand	SP	medium dense	120	5.4	34	2,450	1,576	1.05	0.55	0.80	140.7	1.81	157.2	27	31	91	35	
12.95	42.5	55.90	3.91	Clayey Silt to Silty Clay	ML/CL	hard	120	3.8	15	2,480	1,591	4.10	0.80	0.72	38.1	2.63		15			3.19	10.1
13.11	43.0	51.43	4.41	Silty Clay to Clay	CL	hard	120	3.7	14	2,510	1,605	4.64	0.82	0.71	34.5	2.70		14			2.93	9.1
13.26	43.5	66.33	3.10	Sandy Silt to Clayey Silt	ML	medium dense	120	4.1	16	2,540	1,620	3.23	0.76	0.72	45.3	2.51	126.8	13	25	44	31	
13.41	44.0	113.23	1.43	Sand to Silty Sand	SP/SM	medium dense	120	4.9	23	2,570	1,634	1.46	0.64	0.76	81.2	2.09	116.1	18	23	68	33	
13.56	44.5	71.00	2.42	Sandy Silt to Clayey Silt	ML	medium dense	120	4.3	17	2,600	1,648	2.51	0.73	0.72	48.5	2.41	114.2	13	23	47	31	
13.72	45.0	65.67	3.67	Clayey Silt to Silty Clay	ML/CL	medium dense	120	4.0	17	2,630	1,663	3.83	0.78	0.70	43.6	2.57	137.0	13	27	42	31	
13.87	45.5	67.30	1.92	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.4	15	2,660	1,677	2.00	0.72	0.72	45.6	2.37	99.3	12	20	44	31	
14.02	46.0	177.67	1.04	Sand	SP	medium dense	120	5.4	33	2,690	1,692	1.06	0.56	0.77	129.0	1.84	146.9	25	29	87	35	
14.17	46.5	219.80	0.96	Sand	SP	dense	120	5.6	39	2,720	1,706	0.97	0.53	0.77	161.0	1.75	172.3	30	34	97	36	
14.33	47.0	179.55	1.32	Sand to Silty Sand	SP/SM	medium dense	120	5.2	34	2,750	1,720	1.34	0.58	0.75	127.7	1.92	153.8	26	31	87	35	
14.48	47.5	335.13	0.64	Gravelly Sand to Sand	SW	dense	120	6.1	55	2,780	1,735	0.65	0.50	0.78	248.1	1.49	248.1	42	50	100	39	
14.63	48.0	366.87	0.72	Gravelly Sand to Sand	SW	dense	120	6.1	61	2,810	1,749	0.73	0.50	0.78	269.7	1.50	269.7	46	54	100	40	
14.78	48.5	333.43	0.87	Sand	SP	dense	120	5.9	57	2,840	1,764	0.87	0.50	0.77	244.1	1.59	244.1	43	49	100	39	
14.94	49.0	308.73	0.68	Gravelly Sand to Sand	SW	dense	120	6.0	52	2,870	1,778	0.69	0.50	0.77	225.1	1.54	225.1	39	45	100	38	
15.09	49.5	310.63	0.75	Sand	SP	dense	120	5.9	52	2,900	1,792	0.76	0.50	0.77	225.6	1.57	225.6	39	45	100	38	
15.24	50.0	355.57	0.68	Gravelly Sand to Sand	SW	dense	120	6.1	59	2,930	1,807	0.69	0.50	0.77	257.2	1.50	257.2	44	51	100	39	
15.39	50.5	367.20	0.70	Gravelly Sand to Sand	SW	dense	120	6.1	61	2,960	1,821	0.71	0.50	0.76	264.5	1.50	264.5	45	53	100	40	
15.54	51.0	363.43	0.66	Gravelly Sand to Sand	SW	dense	120	6.1	60	2,990	1,836	0.67	0.50	0.76	260.8	1.48	260.8	44	52	100	39	
15.70	51.5	351.30	0.51	Gravelly Sand to Sand	SW	dense	120	6.2	56	3,020	1,850	0.51	0.50	0.76	251.1	1.42	251.1	42	50	100	39	
15.85	52.0	311.27	0.50	Gravelly Sand to Sand	SW	dense	120	6.2	51	3,050	1,864	0.50	0.50	0.75	221.6	1.45	221.6	37	44	100	38	
16.00	52.5	156.00	2.05	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	32	3,080	1,879	2.09	0.65	0.69	101.7	2.12	152.5	24	31	78	34	
16.15	53.0	55.33	4.35	Clayey Silt to Silty Clay	ML/CL	hard	120	3.7	15	3,110	1,893	4.60	0.83	0.62	32.3	2.72		15			3.14	8.3
16.31	53.5	246.33	1.03	Sand	SP	dense	120	5.6	44	3,140	1,908	1.04	0.54	0.73	169.8	1.75	182.2	32	36	99	37	
16.46	54.0	282.57	0.87	Sand	SP	dense	120	5.8	49	3,170	1,922	0.88	0.51	0.74	197.4	1.85	198.6	35	40	100	37	
16.61	54.5	302.27	0.81	Gravelly Sand to Sand	SW	dense	120	6.0	50	3,200	1,936	0.62	0.50	0.74	211.2	1.53	211.2	36	42	100	38	
16.76	55.0	291.33	0.69	Gravelly Sand to Sand	SW	dense	120	5.9	49	3,230	1,951	0.70	0.50	0.74	202.8	1.58	202.8	35	41	100	37	
16.92	55.5	290.80	1.02	Sand	SP	dense	120	5.7	51	3,260	1,965	1.03	0.52	0.72	199.2	1.70	206.7	37	41	100	38	
17.07	56.0	360.03	0.99	Sand	SP	dense	120	5.8	62	3,290	1,980	1.00	0.50	0.73	248.8	1.62	248.8	44	50	100	39	
17.22	56.5	400.57	0.62	Gravelly Sand to Sand	SW	dense	120	6.2	65	3,320	1,994	0.62	0.50	0.73	275.8	1.45	275.8	46	55	100	40	
17.37	57.0	418.17	0.62	Gravelly Sand to Sand	SW	dense	120	6.2	68	3,350	2,008	0.63	0.50	0.73	286.9	1.43	286.9	48	57	100	40	
17.53	57.5	410.23	0.76	Gravelly Sand to Sand	SW	dense	120	6.0	68	3,380	2,023	0.77	0.50	0.72	280.4	1.51	280.4	48	58	100	40	
17.68	58.0	366.53	0.87	Gravelly Sand to Sand	SW	dense	120	5.9	62	3,410	2,037	0.88	0.50	0.72	249.7	1.58	249.7	44	50	100	39	
17.83	58.5	352.73	1.01	Sand	SP	dense	120	5.8	61	3,440	2,052	1.02	0.50	0.72	238.9	1.64	238.7	43	48	100	39	
17.98	59.0	339.27	1.07	Sand	SP	dense	120	5.7	59	3,470	2,066	1.08	0.51	0.71	227.5	1.68	232.4	41	46	100	39	
18.14	59.5	320.80	1.03	Sand	SP	dense	120	5.7	56	3,500	2,080	1.04	0.51	0.71	214.1	1.68	219.6	39	44	100	38	
18.29	60.0	353.47	0.75	Gravelly Sand to Sand	SW	dense	120	6.0	59	3,530	2,095	0.76	0.50	0.71	237.4	1.55	237.4	41	47	100	39	
18.44	60.5	345.17	0.61	Gravelly Sand to Sand	SW	dense	120	6.1	57	3,560	2,109	0.62	0.50	0.71	231.1	1.50	231.1	39	46	100	38	
18.59	61.0	333.23	0.54	Gravelly Sand to Sand	SW	dense	120	6.1	55	3,590	2,124	0.55	0.50	0.71	222.3	1.48	222.3	37	44	100	38	
18.75	61.5	414.07	0.46	Gravelly Sand to Sand	SW	dense	120	6.3	65	3,620	2,138	0.46	0.50	0.70	275.3	1.36	275.3	45	55	100	39	
18.90	62.0	432.40	0.46	Gravelly Sand to Sand	SW	dense	120	6.4	68	3,650	2,152	0.47	0.50	0.70	286.5	1.35	286.5	46	57	100	40	
19.05	62.5	404.90	0.51	Gravelly Sand to Sand	SW	dense	120	6.3	65	3,680	2,167	0.51	0.50	0.70	267.4	1.40	267.4	44	53	100	39	
19.20	63.0	377.07	0.46	Gravelly Sand to Sand	SW	dense	120	6.3	60	3,710	2,181	0.47	0.50	0.70	248.2	1.40	248.2	41	50	100	39	
19.35	63.5	380.97	0.48	Gravelly Sand to Sand	SW	dense	120	6.3	61	3,740	2,196	0.48	0.50	0.69	250.0	1.40	250.0	41	50	100	39	
19.51	64.0	421.57	0.47	Gravelly Sand to Sand	SW	dense	120	6.3	67	3,770	2,210	0.47	0.50	0.69	275.7	1.36	275.7	45	55	100	40	
19.66	64.5	471.87	0.44	Gravelly Sand to Sand	SW	dense	120	6.4	73	3,800	2,224	0.44	0.50	0.69	307.6	1.31	307.6	49	62	100	40	



CPT No: CPT-11

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

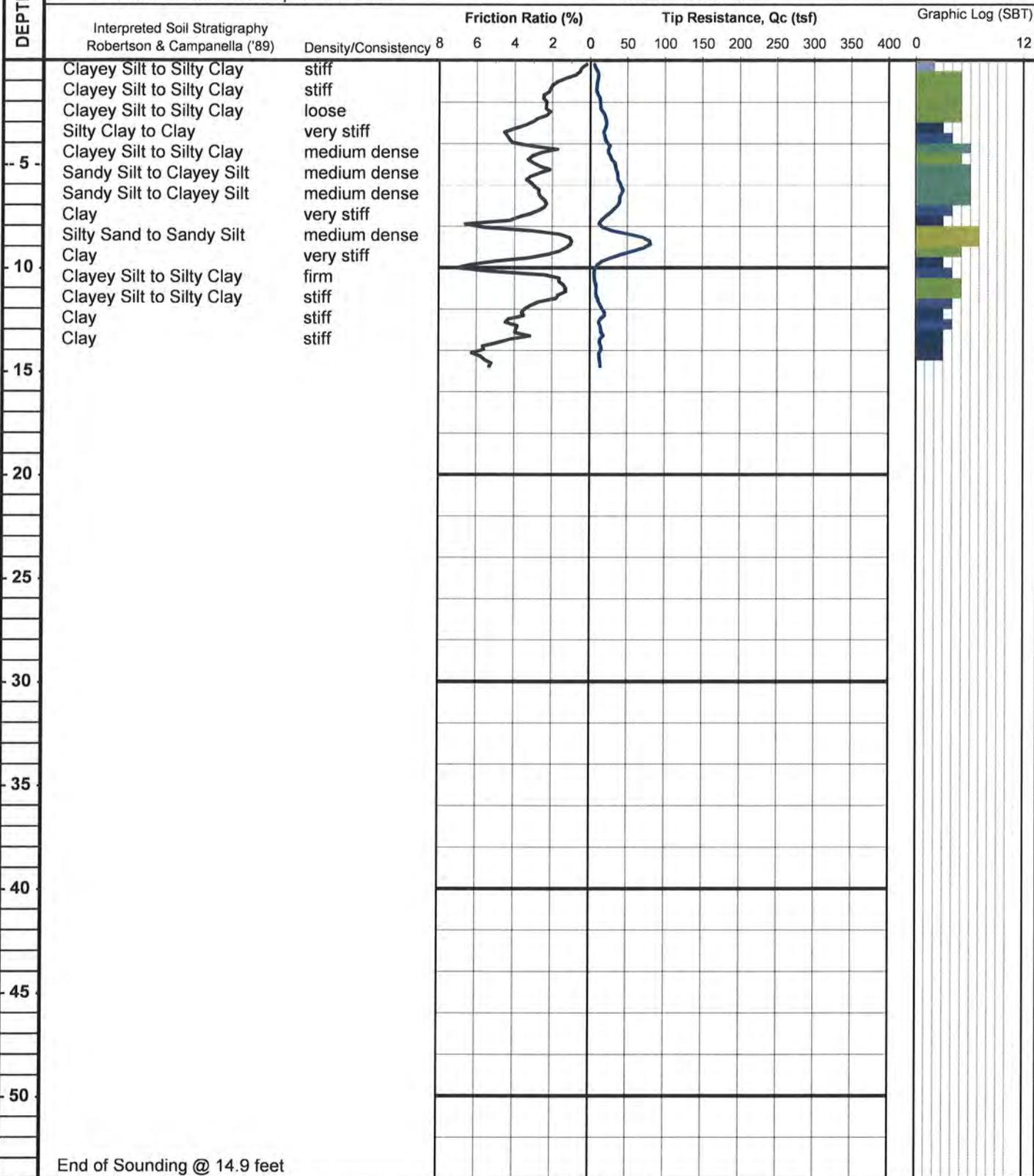
Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017



End of Sounding @ 14.9 feet

Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-11		Plot: 11		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																
Est. GWT (feet): 14.0		Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4 SPT N												
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm. Qc1n	2.6 Ic	Clean Sand N1(60)	Clean Sand N1(60)	Rel. Dens. Dr (%)	Phi (deg)	Nk Su (tsf)	17 OCR
0.15	0.5	8.67	0.59	Sensitive fine grained	ML	very loose	110	4.0	2	0.014	0.014	0.59	0.77	1.70	13.9	2.53	40.7	4	8	-5	28	
0.30	1.0	9.43	1.65	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.7	3	0.041	0.041	1.65	0.82	1.70	15.2	2.70	3				0.55	88.3
0.46	1.5	8.87	2.24	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.5	3	0.069	0.069	2.26	0.85	1.70	14.2	2.80	3				0.52	38.4
0.61	2.0	12.87	2.39	Clayey Silt to Silty Clay	ML/CL	stiff	110	3.7	3	0.096	0.096	2.40	0.81	1.70	20.7	2.68	3				0.75	39.8
0.76	2.5	16.43	2.26	Clayey Silt to Silty Clay	ML/CL	loose	110	3.9	4	0.124	0.124	2.27	0.78	1.70	26.4	2.58	85.4	7	17	22	29	
0.91	3.0	20.90	3.12	Clayey Silt to Silty Clay	ML/CL	loose	110	3.9	5	0.151	0.151	3.14	0.79	1.70	33.6	2.59	110.5	9	22	32	30	
1.07	3.5	18.63	4.34	Clay	CL/CH	very stiff	110	3.7	5	0.179	0.179	4.38	0.83	1.70	29.9	2.73	5				1.09	31.0
1.22	4.0	22.63	3.87	Silty Clay to Clay	CL	very stiff	110	3.8	6	0.206	0.206	3.91	0.80	1.70	36.4	2.63	6				1.32	32.6
1.37	4.5	24.93	2.48	Sandy Silt to Clayey Silt	ML	medium dense	110	4.2	6	0.234	0.234	2.50	0.75	1.70	40.1	2.47	105.2	10	21	39	30	
1.52	5.0	31.53	3.01	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	8	0.261	0.261	3.03	0.74	1.70	50.7	2.45	128.6	13	26	49	31	
1.68	5.5	36.03	2.84	Sandy Silt to Clayey Silt	ML	medium dense	110	4.3	8	0.289	0.289	2.86	0.73	1.70	57.9	2.39	132.3	14	26	54	31	
1.83	6.0	41.63	2.94	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	10	0.316	0.316	2.96	0.72	1.70	66.9	2.36	144.0	16	29	60	32	
1.98	6.5	40.23	2.61	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	9	0.344	0.344	2.63	0.71	1.70	64.6	2.33	133.1	15	27	59	32	
2.13	7.0	34.40	2.48	Sandy Silt to Clayey Silt	ML	medium dense	110	4.4	8	0.371	0.371	2.50	0.72	1.70	55.3	2.37	120.7	13	24	52	31	
2.29	7.5	19.63	3.73	Silty Clay to Clay	CL	very stiff	110	3.8	5	0.399	0.399	3.81	0.81	1.70	31.5	2.67	5				1.13	14.5
2.44	8.0	19.30	5.09	Clay	CL/CH	very stiff	110	3.6	5	0.426	0.426	5.21	0.84	1.70	31.0	2.77	5				1.11	13.3
2.59	8.5	67.07	1.24	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	13	0.454	0.454	1.25	0.60	1.66	105.0	1.96	131.2	19	26	79	33	
2.74	9.0	70.10	1.32	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	14	0.481	0.481	1.32	0.60	1.60	106.3	1.97	134.4	20	27	79	33	
2.90	9.5	28.47	3.54	Clayey Silt to Silty Clay	ML/CL	loose	110	4.0	7	0.509	0.509	3.60	0.77	1.70	45.7	2.54	135.3	10	27	44	30	
3.05	10.0	7.23	6.21	Clay	CL/CH	firm	110	2.8	3	0.536	0.536	6.71	0.96	1.70	11.6	3.16	3				0.39	3.7
3.20	10.5	5.67	1.89	Silty Clay to Clay	CL	firm	110	3.2	2	0.564	0.564	2.10	0.90	1.70	9.1	2.95	2				0.30	2.7
3.35	11.0	7.73	1.34	Clayey Silt to Silty Clay	ML/CL	firm	120	3.6	2	0.593	0.593	1.45	0.85	1.63	11.9	2.76	2				0.42	3.6
3.51	11.5	9.53	2.08	Clayey Silt to Silty Clay	ML/CL	stiff	120	3.5	3	0.623	0.623	2.22	0.86	1.57	14.2	2.80	3				0.52	4.3
3.66	12.0	16.13	3.40	Silty Clay to Clay	CL	stiff	120	3.6	4	0.653	0.653	3.55	0.84	1.50	22.9	2.75	4				0.91	7.1
3.81	12.5	14.87	4.10	Clay	CL/CH	stiff	120	3.4	4	0.683	0.683	4.30	0.87	1.46	20.5	2.84	4				0.83	6.2
3.96	13.0	14.10	3.92	Silty Clay to Clay	CL	stiff	120	3.4	4	0.713	0.713	4.13	0.87	1.41	18.8	2.86	4				0.79	5.6
4.11	13.5	14.37	4.10	Clay	CL/CH	stiff	120	3.4	4	0.743	0.743	4.32	0.88	1.36	18.5	2.88	4				0.60	5.5
4.27	14.0	13.90	5.85	Clay	CL/CH	stiff	120	3.1	4	0.773	0.773	6.20	0.91	1.33	17.5	3.00	4				0.77	5.1
4.42	14.5	12.57	5.53	Clay	CL/CH	stiff	120	3.1	4	0.803	0.787	5.90	0.92	1.31	15.6	3.02	4				0.69	4.5



CPT No: CPT-12

CPT Vendor: Kehoe Testing and Engineering

Project Name: Doris and Patterson

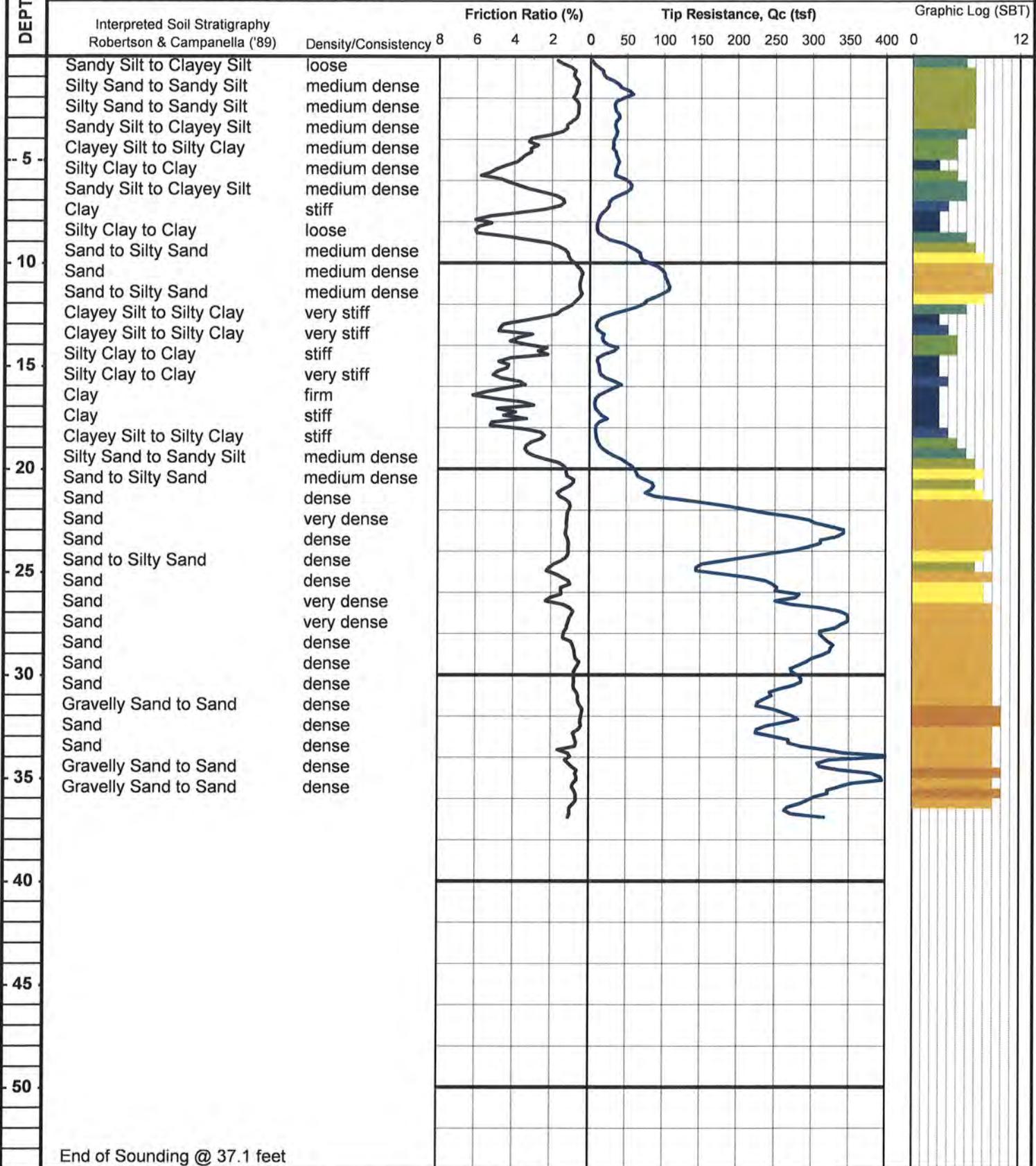
Truck Mounted Electric

Project No.: VT-24867-10

Cone with 23-ton reaction

Location: See Site Exploration Plan

Date: 8/28/2017



Project: Doris and Patterson

Project No: VT-24867-10

Date: 08/28/17

CPT SOUNDING: CPT-12		Plot: 12		Density: 1 SPT N		Program developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest																	
Est. GWT (feet): 14.0				Dr correlation: 0 Baldi		Qc/N: 0		Jefferies & Davies				Phi Correlation: 4 SPT N											
Base Depth meters	Base Depth feet	Avg Tip Qc, tsf	Avg Friction Ratio, %	Soil Classification	USCS	Density or Consistency	Est. Density (pcf)	Qc to N	SPT N(60)	Total po tsf	p'o tsf	F	n	Cq	Norm: Qc1n	2.6 Ic	Clean Sand N ₁₍₆₀₎	Clean Sand N ₁₍₆₀₎	Rel. Dr (%)	Phi (deg)	Nk: Su (tsf)	OCR	
0.15	0.5	10.73	1.09	Sandy Silt to Clayey Silt	ML	loose	110	4.0	3	0.014	0.014	1.09	0.78	1.70	17.2	2.56	53.6	5	11	4	28		
0.30	1.0	23.00	0.78	Silty Sand to Sandy Silt	SM/ML	loose	110	4.7	5	0.041	0.041	0.78	0.67	1.70	37.0	2.20	61.9	8	12	36	29		
0.46	1.5	44.00	0.68	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	8	0.069	0.069	0.68	0.59	1.70	70.7	1.93	86.2	14	17	62	31		
0.61	2.0	46.30	0.81	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.2	9	0.096	0.096	0.81	0.60	1.70	74.4	1.96	92.7	15	19	65	32		
0.76	2.5	33.53	0.63	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	7	0.124	0.124	0.63	0.61	1.70	53.9	2.01	71.1	11	14	51	30		
0.91	3.0	37.50	0.79	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.0	7	0.151	0.151	0.79	0.62	1.70	60.3	2.03	80.5	13	16	56	31		
1.07	3.5	34.57	1.30	Silty Sand to Sandy Silt	SM/ML	medium dense	110	4.7	7	0.179	0.179	1.31	0.66	1.70	55.5	2.18	90.2	12	18	52	31		
1.22	4.0	32.83	2.81	Sandy Silt to Clayey Silt	ML	medium dense	110	4.3	8	0.206	0.206	2.83	0.73	1.70	52.8	2.42	126.0	13	25	50	31		
1.37	4.5	31.97	3.00	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	8	0.234	0.234	3.02	0.74	1.70	51.4	2.45	129.1	13	26	49	31		
1.52	5.0	36.93	3.66	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.2	9	0.261	0.261	3.68	0.75	1.70	59.3	2.46	153.7	15	31	55	32		
1.68	5.5	34.85	5.09	Clay	CL/CH	medium dense	110	3.9	9	0.289	0.289	5.14	0.78	1.70	56.0	2.59	181.9	15	36	53	32		
1.83	6.0	51.47	4.25	Clayey Silt to Silty Clay	ML/CL	medium dense	110	4.3	12	0.316	0.316	4.28	0.73	1.70	82.7	2.42	198.2	20	39	69	33		
1.98	6.5	46.80	2.48	Sandy Silt to Clayey Silt	ML	medium dense	110	4.6	10	0.344	0.344	2.49	0.69	1.70	75.2	2.27	139.7	17	28	65	32		
2.13	7.0	26.57	1.47	Sandy Silt to Clayey Silt	ML	loose	110	4.5	6	0.371	0.371	1.49	0.70	1.70	42.7	2.31	84.3	10	17	42	30		
2.29	7.5	17.30	3.77	Silty Clay to Clay	CL	stiff	110	3.7	5	0.399	0.399	3.86	0.82	1.70	27.8	2.71	5					0.99	12.7
2.44	8.0	9.90	5.71	Clay	CL/CH	stiff	110	3.1	3	0.426	0.426	5.97	0.72	1.70	15.9	3.02	3					0.56	6.7
2.59	8.5	12.53	5.48	Clay	CL/CH	stiff	110	3.3	4	0.454	0.454	5.69	0.89	1.70	20.1	2.93	4					0.71	8.0
2.74	9.0	40.37	2.36	Sandy Silt to Clayey Silt	ML	medium dense	110	4.5	9	0.481	0.481	2.39	0.70	1.70	64.9	2.30	126.9	13	25	59	31		
2.90	9.5	65.43	1.21	Silty Sand to Sandy Silt	SM/ML	medium dense	110	5.1	13	0.509	0.509	1.22	0.60	1.56	96.2	1.98	122.5	18	25	75	33		
3.05	10.0	80.93	0.83	Sand to Silty Sand	SP/SM	medium dense	100	5.4	15	0.535	0.535	0.83	0.56	1.46	111.8	1.82	125.6	20	25	81	33		
3.20	10.5	99.73	0.44	Sand	SP	medium dense	100	5.8	17	0.560	0.560	0.44	0.50	1.37	129.6	1.61	129.6	23	26	88	34		
3.35	11.0	105.37	0.52	Sand	SP	medium dense	120	5.8	18	0.588	0.588	0.52	0.50	1.34	133.7	1.64	133.7	24	27	89	34		
3.51	11.5	97.47	0.49	Sand	SP	medium dense	120	5.7	17	0.618	0.618	0.49	0.51	1.31	121.0	1.66	121.0	22	24	85	34		
3.66	12.0	70.63	0.93	Sand to Silty Sand	SP/SM	medium dense	120	5.2	14	0.648	0.648	0.94	0.59	1.34	89.2	1.93	108.9	17	22	72	32		
3.81	12.5	31.53	1.94	Sandy Silt to Clayey Silt	ML	loose	120	4.3	7	0.678	0.678	1.99	0.73	1.38	41.3	2.40	94.8	9	19	40	30		
3.96	13.0	9.73	4.28	Clay	CL/CH	stiff	120	3.1	3	0.708	0.708	4.61	0.92	1.45	13.3	3.01	3					0.53	3.8
4.11	13.5	15.87	3.85	Silty Clay to Clay	CL	stiff	120	3.5	5	0.738	0.738	4.04	0.86	1.36	20.5	2.83	5					0.89	6.2
4.27	14.0	26.23	3.28	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.9	7	0.768	0.768	3.38	0.80	1.29	32.1	2.63	7					1.50	10.0
4.42	14.5	20.63	3.03	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.7	6	0.798	0.798	3.15	0.82	1.28	25.0	2.69	6					1.17	7.6
4.57	15.0	11.50	4.48	Clay	CL/CH	stiff	120	3.1	4	0.828	0.796	4.83	0.92	1.30	14.1	3.00	4					0.63	4.0
4.72	15.5	16.47	4.89	Clay	CL/CH	stiff	120	3.3	5	0.858	0.811	5.16	0.89	1.27	19.7	2.91	5					0.92	5.8
4.88	16.0	32.33	4.27	Silty Clay to Clay	CL	very stiff	120	3.8	9	0.888	0.825	4.39	0.81	1.22	37.4	2.66	9					1.85	11.4
5.03	16.5	9.20	4.94	Clay	CL/CH	firm	120	2.9	3	0.918	0.840	5.49	0.96	1.25	10.8	3.13	3					0.49	3.0
5.18	17.0	8.63	3.91	Clay	CL/CH	firm	120	2.9	3	0.948	0.854	4.39	0.95	1.23	10.0	3.09	3					0.46	2.7
5.33	17.5	17.30	4.34	Clay	CL/CH	stiff	120	3.4	5	0.978	0.888	4.60	0.88	1.19	19.4	2.88	5					0.97	5.6
5.49	18.0	8.00	3.78	Clay	CL/CH	firm	120	2.9	3	1.008	0.883	4.33	0.96	1.19	9.0	3.13	3					0.42	2.4
5.64	18.5	9.60	2.68	Silty Clay to Clay	CL	stiff	120	3.2	3	1.038	0.897	3.00	0.91	1.16	10.5	2.98	3					0.51	2.9
5.79	19.0	18.80	3.34	Clayey Silt to Silty Clay	ML/CL	very stiff	120	3.5	5	1.068	0.912	3.54	0.85	1.14	20.2	2.80	5					1.05	5.8
5.94	19.5	41.70	2.31	Sandy Silt to Clayey Silt	ML	medium dense	120	4.2	10	1.098	0.926	2.38	0.74	1.10	43.5	2.43	106.0	10	21	42	30		
6.10	20.0	60.03	1.27	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.8	13	1.128	0.940	1.30	0.65	1.08	61.3	2.15	94.8	13	19	57	31		
6.25	20.5	74.53	0.96	Sand to Silty Sand	SP/SM	medium dense	120	5.1	15	1.158	0.955	0.97	0.61	1.06	75.0	2.00	97.6	15	20	65	32		
6.40	21.0	81.33	1.41	Silty Sand to Sandy Silt	SM/ML	medium dense	120	4.9	17	1.188	0.969	1.43	0.63	1.06	81.3	2.08	115.3	17	23	68	32		
6.55	21.5	123.37	1.29	Sand to Silty Sand	SP/SM	medium dense	120	5.2	24	1.218	0.984	1.30	0.59	1.04	121.7	1.92	147.4	24	29	85	34		
6.71	22.0	214.10	1.09	Sand	SP	dense	120	5.7	38	1.248	0.998	1.10	0.52	1.03	208.6	1.71	212.5	38	43	100	38		
6.86	22.5	290.30	1.20	Sand	SP	very dense	120	5.8	50	1.278	1.012	1.20	0.50	1.02	280.6	1.65	282.2	50	56	100	41		
7.01	23.0	336.37	1.24	Sand	SP	very dense	120	5.8	58	1.308	1.027	1.24	0.50	1.02	322.7	1.63	322.7	57	65	100	42		
7.16	23.5	318.03	1.15	Sand	SP	very dense	120	5.8	55	1.338	1.041	1.15	0.50	1.01	303.0	1.62	303.0	53	61	100	41		
7.32	24.0	270.67	1.12	Sand	SP	dense	120	5.8	47	1.368	1.056	1.13	0.51	1.00	256.1	1.66	258.2	46	52	100	40		
7.47	24.5	182.47	1.51	Sand to Silty Sand	SP/SM	dense	120	5.3	34	1.398	1.070	1.52	0.57	0.99	171.4	1.87	199.1	33	40	99	37		
7.62	25.0	155.90	2.04	Silty Sand to Sandy Silt	SM/ML	medium dense	120	5.1	31	1.428	1.084	2.05	0.61	0.99	145.2	2.01	191.6	30	38	92	36		
7.77	25.5	232.97	1.19	Sand	SP	dense	120	5.6	41	1.458	1.099	1.20	0.53	0.98	215.9	1.72	227.6	40	48	100	38		
7.92	26.0	261.87	1.50	Sand to Silty Sand	SP/SM	dense	120	5.5	47	1.488	1.113	1.51	0.54	0.97	240.8	1.77	261.8	45	52	100	40		
8.08	26.5	277.48	1.69	Sand to Silty Sand	SP/SM	dense	120	5.5	51	1.518	1.128	1.70	0.55	0.97	253.3	1.80	280.4	48	56	100	40		
8.23	27.0	343.80	0.95	Sand	SP	very dense	120	6.0	58	1.548	1.142	0.95	0.50	0.96	312.8	1.54	312.8	54	63	100	41		
8.38	27.5	339.43	1.15	Sand	SP	very dense	120	5.8	58	1.578	1.156	1.16	0.50	0.96	306.9	1.62	306.9	54	61	100	41		
8.53	28.0	312.30	1.35	Sand	SP	very dense	120	5.7	55	1.608	1.171	1.36	0.52	0.95	280.1	1.70	289.9	51	58	100	41		
8.69	28.5	324.50	0.89	Sand	SP	dense	120	6.0	54	1.638	1.185	0.89	0.50	0.94	289.8	1.54	289.8	50	58	100	41		
8.84	29.0	311.67	0.75	Sand	SP	dense	120	6.1	51	1.668	1.200	0.75	0.50	0.94	276.7	1.50	276.7	47	55	100	40		
8.99	29.5	281.57	0.61	Sand	SP	dense	120	6.1	46	1.698	1.214	0.62	0.50	0.93	248.5	1.48	248.5	42	50	100	39		
9.14	30.0	279.87	0.80	Sand	SP	dense	120	5.9	47	1.728	1.228	0.81	0.50	0.93	245.5	1.58	245.5	43	49	100			

Boring Log

				Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2			Boring No. : B-1 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14		
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests
				0			ML	FILL: Sandy SILT; soft	
1	19.1		4 4 3	4 3			ML	ALLUVIUM SILT with SAND; firm, layers of sandy clay, moist, dark olive brown	#200 Wash Fines = 81 %
2	20.2	112	6 10 13	5			ML	Sandy SILT; stiff, slightly moist, light brown	#200 Wash Fines = 67 % PP = 2.5 tsf
3	17.8		2 3 4	2 3 4			SC	Layers of sandy lean clay Clayey SAND; loose, moist, dark brown	PP=0.5-0.75 tsf #200 Wash Fines = 38 %
4	17.2	111	7 10 14	7 10 14			SM	Silty SAND; medium dense, very moist, mottled yellowish brown and grayish brown	#200 Wash Fines = 16 %
5	21.4		7 6 5	15			ML	Sandy SILT; stiff, moist, pale brown Thin layers of lean clay	#200 Wash Fines = 54 %
6	20.2		10 14 21	20			SM	Silty SAND; dense, wet, olive gray	#200 Wash Fines = 14 %
7	20.1		15 17 22	25				Lenses of lean clay	#200 Wash Fines = 13 %
End of Boring @ 26' 6"								Groundwater encountered @ 17'	

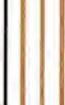
Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy		Boring No. : B-2 Sheet : 1 Of : 2		
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
								Description	Additional Tests		
				0			SM	FILL			
				2				Silty SAND; very fine, loose, dry, light brown			
1	21.5	102	2 3 6	3				ALLUVIUM			#200 Wash Fines = 63% PP = 1.2 tsf
				5				Sandy Lean CLAY; firm, moist, brown			
2	24.8		2 2 3	5				Lean clay			#200 Wash Fines = 85% PP = 2.5 tsf
				3				Lean Clay			
3	24.4	96	3 5 4	4				Lean Clay			#200 Wash Fines = 87%
				10				8" layers of of clayey sand			#200 Wash Fines = 37% LL = 21 PL = 16
4	18.0		2 3 4	10				8" layers of of clayey sand			
				15				Sandy SILT; firm, moist, olive brown			#200 Wash Fines = 64% PP = 3.5 tsf
5	21.4		2 3 4	15				Sandy SILT; firm, moist, olive brown			
				20				Sandy SILT; firm, moist, olive brown			#200 Wash Fines = 56%
6	21.8		2 4 6	20			ML	Sandy SILT; firm, moist, olive brown			
				25				Sandy SILT; firm, moist, olive brown			
7	21.5		7 10 12	25				Sandy SILT; firm, moist, olive brown			
				30				Sandy SILT; firm, moist, olive brown			
8	21.4		7 8 9	30				Sandy SILT; firm, moist, olive brown			
				35				Sandy SILT; firm, moist, olive brown			
9	19.0		9 8 13	35			SP-SM	Poorly graded SAND with SILT; fine to medium, medium dense, wet, brownish gray			#200 Wash Fines = 8%
				40				Poorly graded SAND with SILT; fine to medium, medium dense, wet, brownish gray			
				40			SM	Silty SAND; fine to medium, lenses of dark brown lean clay, wet, gray and yellowish brown			#200 Wash Fines = 40%

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Boring No. : B-2 Sheet : 2 Of : 2 Ground Elevation: Drilling Co. : Geoboden. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
10	20.1		10 14 22	40	X		SP-SM	Poorly graded SAND with SILT; fine, dense, wet, dark olive gray	#200 Wash Fines = 5%	
11	19.5		4 6 10	45	X		ML	Sandy SILT; layers of sandy lean clay, very stiff, moist, gray	#200 Wash Fines = 70%	
12	19.9		8 13 18	50	X		SP-SM	Poorly graded SAND with SILT; fine to coarse, medium dense	#200 Wash Fines = 11%	
End of Boring @ 51' 6" Groundwater encountered @15' 8"										

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy		Boring No. : B-3 Sheet : 1 Of : 1		
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
								Description	Additional Tests		
1	20.8		3 3 4	0			ML	FILL			
								Sandy SILT; soft, moist			
2	24.1	103	6 8 10	5			ML	ALLUVIUM : Sandy SILT; thin layers of sandy clay, firm, moist, dark brown	#200 Wash Fines = 67%		
								Thin layers of sandy clay	#200 Wash Fines = 75% PP = 2.2 tsf		
3	26.1		3 4 6	10			CL	Sandy Lean CLAY; layers of sandy silt, firm, moist, light olive gray	#200 Wash Fines = 65% PP=1.5-1.7 tsf		
								Layers of silty sand	#200 Wash Fines = 64%		
4	22.3	103	7 8 10	15			ML	SILT; stiff, moist, pale brown			
								Layers of silty sand	#200 Wash Fines = 87% PP = 4.0 tsf		
6	21.0		3 5 6	20			CL	Sandy Lean CLAY; thin layers of sandy silt, stiff, moist, pale brown	#200 Wash Fines = 59% LL = 28 PL = 20 PP = 1.7 tsf		
								Sandy SILT; thin layers of lean clay with sand, very stiff, moist, pale brown			
7	23.0		10 14 18	25			ML	Sandy SILT; thin layers of lean clay with sand, very stiff, moist, pale brown			
								Thin layers of silty sand	#200 Wash Fines = 80% PP = 4.0 tsf		
								End of Boring @ 26' 6" Groundwater encountered @ approx. 19'			

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy		Boring No. : P-1 Sheet : 1 Of : 1			
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2		Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14		
								Description	Additional Tests			
1	7.9			0			ML	FILL: Sandy SILT; slightly moist, brown	#200 Wash Fines = 57%			
2	12.8						ML	ALLUVIUM Sandy SILT; firm, slightly moist, brown	#200 Wash Fines = 66%			
3	23.4						CL	Sandy Lean CLAY; firm, moist, dark brown, caliche	Fines = 80%			
4	24.4			5					Fines = 69%			
5	24.2								Fines = 62%			
6	25.2						ML	Sandy SILT; very moist, pale brown	Fines = 50%			
7	28.0						SM	Silty SAND; very moist, pale brown	Fines = 37%			
								End of Boring @ 8' No groundwater encountered				
				10								
				15								
				20								
				25								
				30								
				35								
				40								

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy		Boring No. : P-2 Sheet : 1 Of : 1	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location Graphic Log	Soil Type (USCS)	Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2		Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
							Description	Additional Tests		
				0		ML	FILL: Sandy SILT; soft			
						CL	ALLUVIUM : Sandy Lean CLAY; firm, moist, dark brown			
				5		ML	Sandy SILT; firm, moist, brown			
							No groundwater encountered			
				10						
				15						
				20						
				25						
				30						
				35						
				40						

Boring Log

			Project No. : 13-0637 Project Name : Teal Club Middle School Academy			Boring No. : P-3 Sheet : 1 Of : 1			
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2	
								Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
								Description	Additional Tests
1	13.6			0			SM	FILL: Silty SAND; fine, moist, dark brown	#200 Wash Fines = 36%
2	18.3			1			SM	ALLUVIUM Silty SAND; fine, moist, dark brown	#200 Wash Fines = 47%
3	23.1			5			ML	Sandy SILT; layers of sandy lean clay, moist, brown	#200 Wash Fines = 65%
4	23.0			6			CL	Sandy Lean CLAY; firm, very moist, brown	#200 Wash Fines = 53%
								End of boring @ 7' 6" No groundwater encountered	



BORING NO: B-1	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0	X					SM			ALLUVIUM: Olive brown silty sand; loose; dry.
5			■	3/4/4		ML/ SM	99.5	16.0	ALLUVIUM: Olive brown sandy silt to silty sand; medium stiff to loose; moist.
5			■	2/3/5		ML	98.7	24.8	ALLUVIUM: Mottled olive brown and gray clayey silt; caliche; medium stiff; moist.
10									Total Depth: 6.5 feet. No Groundwater Encountered.
15									
20									
25									
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-2	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; medium stiff; dry.
5			█	4/4/5		ML	103.9	15.9	ALLUVIUM: Olive brown sandy silt; stiff; moist.
10			█	3/5/8		ML	108.9	11.8	
15			█	4/6/8		SM/ML			ALLUVIUM: Pale olive brown silty fine sand to sandy silt; iron stains; loose; moist.
20			█	3/2/3		SM/ML	108.3	16.4	ALLUVIUM: Mottled olive brown and grayish brown silty sand to sandy silt; fine to medium grained; iron stains; loose; very moist.
25			█			CL			ALLUVIUM: Interbedded pale olive brown sandy clay; soft; wet.
30									Total Depth: 16.5 feet. Groundwater Depth: 14.0 feet.
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-3	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5			4/5/7			ML	99.2	16.3	ALLUVIUM: Olive brown sandy silt; minor clay; caliche; stiff; moist.
10			4/5/6			SM/ML	97.6	22.5	ALLUVIUM: Interbedded olive brown silty sand and sandy silt; loose; moist.
15			5/6/9			SM/ML	102.8	22.0	ALLUVIUM: Mottled olive brown and grayish brown silty sand to sandy silt; iron stains; loose; moist.
20			3/6/8			ML			ALLUVIUM: Mottled olive brown and grayish brown sandy silt; stiff; moist.
25			2/3/4			ML			ALLUVIUM: Mottled olive brown and grayish brown sandy silt; medium stiff; moist.
30									Total Depth: 21.5 feet. No Groundwater Encountered.
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-4	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5			3/4/6			ML	97.7	20.7	ALLUVIUM: Dark olive brown sandy silt; pores and rootlets; medium stiff; damp.
10			4/6/7			ML	100.8	23.7	ALLUVIUM: Dark olive brown sandy silt; caliche; stiff; moist.
15			3/4/8			SM/ML	109.3	18.6	ALLUVIUM: Mottled olive brown and grayish brown silty sand and sandy silt; iron stains; loose; moist.
20			3/5/7			ML			ALLUVIUM: Mottled olive brown sandy silt; mica; stiff; moist.
25			6/5/7			SM			ALLUVIUM: Mottled grayish brown silty fine sand; loose; moist.
30									Total Depth: 21.5 feet. No Groundwater Encountered.
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-5	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
3				3/5/8		ML	96.6	15.9	ALLUVIUM: Olive brown sandy silt; rootlets; some caliche; stiff; damp.
6				6/6/6		ML	102.8	24.4	ALLUVIUM: Mottled olive brown and grayish brown sandy silt; some clay; caliche; stiff; moist.
10				4/8/11		SM	117.4	14.6	ALLUVIUM: Mottled olive brown and grayish brown and black silty fine sand; medium dense; moist.
15				3/5/8		ML			ALLUVIUM: Pale gray sandy silt; iron stains; stiff; moist.
20				5/7/8		SM			ALLUVIUM: Mottled grayish brown silty fine sand; medium dense; moist.
21.5	Total Depth: 21.5 feet. No Groundwater Encountered.								

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-6	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5				4/5/5		ML	95.0	17.4	ALLUVIUM: Olive brown sandy silt; pinhole voids and rootlets; medium stiff; damp.
10				7/6/6		ML	101.7	21.9	ALLUVIUM: Olive brown sandy silt; stiff; moist.
15				3/5/9		SM/ML	115.5	15.7	ALLUVIUM: Mottled grayish brown and black silty fine sand and sandy silt; loose; very moist.
20				6/8/6		SM/ML			ALLUVIUM: Mottled grayish brown and black silty fine sand and sandy silt; loose; very moist.
25				3/5/6		SM			ALLUVIUM: Mottled gray silty fine sand; iron stains; loose; moist.
30									Total Depth: 21.5 feet. No Groundwater Encountered.
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-7	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
3			█	3/3/3		ML	90.2	17.2	ALLUVIUM: Olive brown sandy silt; soft; damp.
5			█	4/6/11		ML	99.6	23.4	
8			█			SM/ML			ALLUVIUM: Mottled olive brown and grayish brown silty sand and sandy silt; medium dense; moist.
10			█	3/3/6		SM			ALLUVIUM: Mottled grayish brown and black silty fine sand; loose; very moist.
15			█	3/5/10		ML			ALLUVIUM: Mottled olive brown and gray sandy silt; soft; moist.
20		█		4/5/6		SM			ALLUVIUM: Mottled olive brown and gray silty fine sand; loose; moist.
21.5									Total Depth: 21.5 feet. No Groundwater Encountered.
25									
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-8	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5			5/7/13			ML	95.4	18.8	ALLUVIUM: Olive brown sandy silt; rootlets; some caliche; very stiff; damp.
10			2/3/4			ML	102.5	22.6	ALLUVIUM: Olive brown sandy silt; medium stiff; moist.
15			2/4/9			SM	110.1	17.9	ALLUVIUM: Mottled olive brown and grayish brown silty fine sand; loose; moist.
20			3/5/7			ML			ALLUVIUM: Mottled olive brown and grayish brown sandy silt; stiff; moist.
25									Total Depth: 16.5 feet. No Groundwater Encountered.
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-9	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; very loose; dry.
5			3/5/6			ML	98.9	22.0	ALLUVIUM: Olive brown sandy silt; rootlets; some caliche; medium dense; damp.
10			5/4/4			ML	102.0	22.8	ALLUVIUM: Mottled olive brown and grayish brown sandy silt; some caliche; medium stiff; moist.
15			2/3/4			ML/SM	103.9	23.6	ALLUVIUM: Blackish brown sandy silt to silty fine sand; medium stiff; very moist.
20									Total Depth: 11.5 feet. No Groundwater Encountered.
25									
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-10	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5			3/4/4			ML	96.2	20.6	ALLUVIUM: Olive brown sandy silt; caliche; medium stiff; moist.
5			5/6/10			ML	103.6	22.9	
10						SM			ALLUVIUM: Mottled olive brown and grayish brown silty fine sand; iron staining; loose; moist.
10			2/2/2			CL	91.5	21.8	ALLUVIUM: Blackish brown sandy clay; medium stiff; very moist.
15			3/3/6			ML			ALLUVIUM: Mottled olive brown and gray sandy silt; some clay; medium stiff; very moist.
20			3/4/9			SM			ALLUVIUM: Mottled gray silty sand to sandy silt; loose; moist.
25									Total Depth: 21.5 feet. No Groundwater Encountered.
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-11	DRILLING DATE: August 15, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 6.0" Hollow Stem Auger
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0	X					ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
3				3/4/5		ML	98.6	21.9	ALLUVIUM: Olive brown sandy silt; some caliche; medium stiff; moist.
5				5/5/7		ML	98.9	22.4	Same as above; but stiff and with higher sand content.
6.5									Total Depth: 6.5 feet. No Groundwater Encountered.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

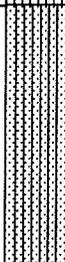


BORING NO: B-12 PROJECT NAME: Doris and Patterson K-8 School PROJECT NUMBER: VT-24867-10 BORING LOCATION: Per Plan	DRILLING DATE: August 24, 2017 DRILL RIG: Mobile B-61 DRILLING METHOD: 4-Inch Diameter Mud Rotary LOGGED BY: SC
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Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5				5/6/7		SM/ML	98.6	24.0	ALLUVIUM: Olive brown and dark brown silty sand and sandy silt; some pinhole voids and rootlets; loose; moist.
10				3/4/4		ML	96.8	21.6	ALLUVIUM: Mottled olive brown sandy silt; medium stiff; moist.
				P/2/4		ML	96.1	26.7	
15				1/2/2		ML/SM			ALLUVIUM: Interbedded olive brown and grayish brown sandy silt and silty fine sand; some caliche; soft; moist.
				1/3/3		ML			ALLUVIUM: Mottled olive brown and gray sandy silt; medium stiff; moist.
				2/3/3		ML			
20				P/2/4		CL		30.0	ALLUVIUM: Mottled olive brown and gray sandy clay; medium stiff; moist.
				3/5/6		CL			ALLUVIUM: Mottled olive brown and gray sandy clay; iron staining; stiff; moist.
25				4/7/13		ML/SM			ALLUVIUM: Interbedded gray silty sand and sandy silt; very stiff; wet.
				9/8/7		ML/SM			
				4/7/13		ML			ALLUVIUM: Olive brown and gray sandy silt; becoming sand; very stiff; wet.
30				12/13/15		SM			ALLUVIUM: Pale olive brown silty fine sand; medium dense; wet.
				14/15/18		SM			ALLUVIUM: Pale olive brown silty sand; fine to medium grained; dense; wet.
35				14/18/22		SM			Same as above.
				16/23/23		SW			ALLUVIUM: Gray well graded sand with some gravels; dense; wet.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-12 (Continued)	DRILLING DATE: August 24, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				13/12/9		SW			
45				9/10/9		ML			ALLUVIUM: Dark gray sandy silt; some clay; very stiff, wet.
50				13/17/20		SM			ALLUVIUM: Gray silty sand; fine to medium grained; medium dense; wet.
				17/22/20		SM			Same as above.
				17/22/22		SM			ALLUVIUM: Gray silty sand; fine to medium grained; medium dense; wet.
55				15/16/18		SP			ALLUVIUM: Gray sand; fine to medium grained; dense; wet.
60				6/4/3		CL		34.8	ALLUVIUM: Dark olive brown sandy silty clay; medium stiff, moist.
				8/18/22		SP			ALLUVIUM: Pale gray fine grained sand; dense; wet.
				11/24/25		SP			
				19/22/23		SP			ALLUVIUM: Pale gray fine grained sand; dense; wet.
65				18/21/22		SP/ SW			ALLUVIUM: Gray fine grained to well graded sand; some gravels; dense; wet.
70									Total Depth: 66.5 feet. Groundwater Depth 22.5 feet.
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-13	DRILLING DATE: August 25, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; very loose; dry.
5				6/6/12		ML	106.4	16.2	ALLUVIUM: Mottled olive brown and gray sandy silt; some caliche; stiff; moist.
				1/1/2		ML			Same as above; soft.
10				P/1/1		ML			ALLUVIUM: Dark brown sandy silt with clay; very soft; moist.
				1/1/2		ML			ALLUVIUM: Pale olive brown clayey silt; soft; moist.
15				P/2/3		ML			ALLUVIUM: Mottled olive brown and gray sandy clayey silt; medium stiff; moist.
				1/2/4		SM/ML			ALLUVIUM: Dark brown silt and sand; loose; moist.
20				4/6/6		ML/SM			ALLUVIUM: Interbedded pale gray silty sand and sandy silt; stiff; wet.
				5/6/14		ML/SM			ALLUVIUM: Interbedded pale gray and olive brown silty sand and sandy silt; very stiff; wet.
25				10/13/10		SM			ALLUVIUM: Pale olive brown slightly silty fine sand; medium dense; wet.
				10/16/18		SM			Same as above; dense.
30				12/13/14		SP			ALLUVIUM: Pale olive brown fine sand; some fine gravel; medium dense; wet.
				15/17/18		SW			ALLUVIUM: Pale olive brown well graded sand; some fine gravel; dense; wet.
35				16/20/23		SP			ALLUVIUM: Olive brown fine sand; dense; wet.
				24/25/27		SP			Same as above; very dense.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-13 (Continued)	DRILLING DATE: August 25, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40				16/24/25	[Stippled Pattern]	SP			ALLUVIUM: Gray fine sand; medium dense; wet.
45				15/18/18	[Stippled Pattern]	SP			ALLUVIUM: Gray sand; fine to medium grained; medium dense; wet.
				20/21/22	[Stippled Pattern]	SP			ALLUVIUM: Gray sand with gravel; coarse grained; medium dense; wet.
				27/30/46	[Stippled Pattern]	SP			ALLUVIUM: Gray sand; fine to medium grained; very dense; wet.
50				24/32/28	[Stippled Pattern]	SP			Same as above; some gravels.
55									Total Depth: 51.5 feet. Unable to measure depth to groundwater
60									
65									
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-14	DRILLING DATE: August 25, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: SC

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5			4/6/9			ML	104.0	19.0	ALLUVIUM: Olive brown sandy silt; caliche; rootlets; stiff; moist.
10			3/5/7			ML	99.7	23.1	
10			4/4/3			SM	112.6	16.4	ALLUVIUM: Mottled olive brown silty fine sand; iron staining; loose; moist.
15			2/2/3			SM			Same as above, but very loose.
15			3/4/5			ML			ALLUVIUM: Mottled olive brown and gray sandy silt; some clay; medium stiff; very moist.
20			4/5/9			SM/ ML			ALLUVIUM: Mottled olive brown and gray silty sand to sandy silt; loose; moist.
25									Total Depth: 21.5 feet. No Groundwater Encountered.
30									
35									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-15	DRILLING DATE: August 28, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: JW

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5				4/6/5		SM			ALLUVIUM: Olive brown silty sand; fine grain; medium dense; damp.
10				1/3/4		ML			ALLUVIUM: Olive brown sandy silt; medium stiff; damp.
15				4/8/7		SM/ML		17.6	ALLUVIUM: Olive brown silty sand and sandy silt; medium dense; damp.
20				4/5/8		SM/ML		22.7	ALLUVIUM: Olive gray silty sand and sandy silt; medium dense; damp.
25				10/13/14		SP			ALLUVIUM: Pale olive brown sand; medium dense; wet.
30				14/17/18		SP			ALLUVIUM: Pale olive brown sand; dense; wet.
35				15/21/34		SP			ALLUVIUM: Olive brown sand with gravels and trace cobbles; very dense; wet.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-15 (Continued)	DRILLING DATE: August 28, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: JW

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40		█		14/20/21	█	SP			ALLUVIUM: Gray sand; medium grained; dense; wet.
45		█		15/18/22	█	SP			ALLUVIUM: Gray sand; medium grained; dense; wet.
50		█		14/18/19	█	SP			Same as above.
55									Total Depth: 51.5 feet. Unable to measure depth to groundwater.
60									
65									
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.



BORING NO: B-16	DRILLING DATE: August 28, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: JW

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6")	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
0						ML			ALLUVIUM: Olive brown sandy silt; soft; dry.
5		■		2/2/4		ML			ALLUVIUM: Olive brown sandy silt; medium stiff; dry.
10		■		3/4/5		SM			ALLUVIUM: Grayish brown silty sand; fine grained; loose; damp.
15		■		3/6/4		SM/ML		17.5	ALLUVIUM: Grayish brown silty sand and sandy silt; loose; damp.
20		■		4/6/6		SM/ML			ALLUVIUM: Dark gray silty sand and sandy silt; medium dense; damp.
25		■		15/16/16		SP		23.8	ALLUVIUM: Dark olive gray fine sand; dense; wet.
30		■		11/11/14		SP			ALLUVIUM: Dark olive gray sand; medium dense; wet.
35		■		17/20/25		SP			ALLUVIUM: Dark olive gray sand; medium dense; wet.

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

BORING NO: B-16 (Continued)	DRILLING DATE: August 28, 2017
PROJECT NAME: Doris and Patterson K-8 School	DRILL RIG: Mobile B-61
PROJECT NUMBER: VT-24867-10	DRILLING METHOD: 4-Inch Diameter Mud Rotary
BORING LOCATION: Per Plan	LOGGED BY: JW

Vertical Depth	Sample Type			PENETRATION RESISTANCE (BLOWS/6"	SYMBOL	USCS CLASS	UNIT DRY WT. (pcf)	MOISTURE CONTENT (%)	DESCRIPTION OF UNITS
	Bulk	SPT	Mod. Calif.						
40		█		30/31/34	[Dotted Pattern]	SP			ALLUVIUM: Dark olive gray sand; some gravel; very dense; wet.
45		█		23/26/40	[Dotted Pattern]	SP			ALLUVIUM: Dark olive gray sand; some gravel; very dense; wet.
50		█		21/31/50-2"	[Dotted Pattern]	SP			Same as above.
55									Total Depth: 51.5 feet. Unable to measure depth to groundwater.
60									
65									
70									
75									

Note: The stratification lines shown represent the approximate boundaries between soil and/or rock types and the transitions may be gradual.

SYMBOLS COMMONLY USED ON BORING LOGS



Modified California Split Barrel Sampler



Modified California Split Barrel Sampler - No Recovery



Standard Penetration Test (SPT) Sampler



Standard Penetration Test (SPT) Sampler - No Recovery



Perched Water Level



Water Level First Encountered



Water Level After Drilling



Pocket Penetrometer (tsf)



Vane Shear (ksf)

1. The location of borings were approximately determined by pacing and/or siting from visible features. Elevations of borings are approximately determined by interpolating between plan contours. The location and elevation of the borings should be considered
2. The stratification lines represent the approximate boundary between soil types and the transition may be gradual.
3. Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. This data has been reviewed and interpretations made in the text of this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, tides, temperature, and other factors at the time measurements were made.

BORING LOG SYMBOLS	
	Earth Systems Southern California

MAJOR DIVISIONS			GRAPH SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)			SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
					SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
					SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS	
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENT	

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM	
 Earth Systems Southern California	

APPENDIX B

Laboratory Testing
Tabulated Laboratory Test Results
Individual Laboratory Test Results
Table 18-I-D

LABORATORY TESTING

- A. Samples were reviewed along with field logs to determine which would be analyzed further. Those chosen for laboratory analysis were considered representative of soils that would be exposed and/or used during grading, and those deemed to be within the influence of proposed structures. Test results are presented in graphic and tabular form in this Appendix.
- B. In-situ Moisture Content and Unit Dry Weight for the ring samples were determined in general accordance with ASTM D 2937.
- C. The relative strength characteristics of soils were determined from the results of Direct Shear tests on remolded samples. Specimens were placed in contact with water at least 24 hours before testing, and were then sheared under normal loads ranging from 1 to 3 ksf in general accordance with ASTM D 3080.
- D. Settlement characteristics were developed from the results of one dimensional Consolidation tests performed in general accordance with ASTM D 2435. The samples were typically loaded to 0.125, then loads were raised incrementally to 0.25 ksf and 0.5 ksf, at which point they were flooded with water, and then incrementally loaded to 0.5, 1.0, 2.0, 4.0 and 8.0 ksf. The samples were allowed to consolidate under each load increment. Rebound was measured under reverse alternate loading. Compression was measured by dial gauges accurate to 0.0001 inch. Results of the consolidation tests are presented in this Appendix in the form of percent consolidation versus log of pressure curves.
- E. Expansion index tests were performed on selected bulk soil samples in accordance with ASTM D 4829. The samples were surcharged under 144 pounds per square foot at moisture content of near 50% saturation. Samples were then submerged in water for 24 hours and the amount of expansion was recorded with a dial indicator.
- F. Maximum density tests were performed to estimate the moisture-density relationship of typical soil materials. The tests were performed in accordance with ASTM D 1557.
- G. The gradation characteristics of selected samples were evaluated by hydrometer (in accordance with ASTM D 422) and sieve analysis procedures. Selected samples were soaked in water until individual soil particles were separated, then washed on the No. 200 mesh sieve, oven dried, weighed to calculate the percent passing the No. 200 sieve, and mechanically sieved. Additionally, hydrometer analyses were performed to assess the distribution of the minus No. 200 mesh material of the samples. The hydrometer portions of the tests were run using sodium hexametaphosphate as a dispersing agent.

LABORATORY TESTING (Continued)

- H. Resistance ("R") Value tests were conducted on selected bulk samples secured during the field study. The tests were performed in accordance with California Method 301. Three specimens at different moisture contents were tested for each sample, and the R-Value at 300 psi exudation pressure was determined from the plotted results.
- I. Portions of the bulk samples were sent to another laboratory for analyses of soil pH, resistivity, chloride contents, and sulfate contents. Soluble chloride and sulfate contents were determined on a dry weight basis. Resistivity testing was performed in accordance with California Test Method 424, wherein the ratio of soil to water was 1:3.
- J. The Plasticity Indices of selected samples were evaluated in accordance with ASTM D 4318.

TABULATED LABORATORY TEST RESULTS

BORING AND DEPTH	B-3 @ 0-5'	B-8 @ 0-5'
USCS	ML	ML
MAXIMUM DENSITY (pcf)	122.0	121.0
OPTIMUM MOISTURE (%)	11.0	12.0
COHESION (psf)	300* 20**	320* 90**
ANGLE OF INTERNAL FRICTION	29°* 33°**	29°* 32°**
EXPANSION INDEX	24	0
pH	7.9	7.8
SOLUBLE CHLORIDES (mg/Kg)	59	35
RESISTIVITY (OHMs-cm)	430	390
SOLUBLE SULFATES (mg/Kg)	3,600	4,500

* = Peak Strength Parameters

** = Ultimate Strength Parameters

BORING AND DEPTH	B-1 @ 0-2'	B-11 @ 0-2.5'
USCS	SM	ML
RESISTANCE ("R") VALUE	23	15

BORING AND DEPTH	B-12 @ 7.5'	B-12 @ 17.5'
USCS	ML	CL
LIQUID LIMIT	--	34
PLASTIC LIMIT	--	19
PLASTICITY INDEX	--	15
GRAIN SIZE DISTRIBUTION (%)		
GRAVEL	0.0	0.0
SAND	37.9	20.8
SILT	39.7	47.3
CLAY (2µm to 5µm)	14.9	8.2
CLAY (≤2µm)	7.5	23.7

TABULATED LABORATORY TEST RESULTS (Continued)

BORING AND DEPTH	B-12 @ 22.5'	B-12 @ 42.5'	B-12 @ 55'
USCS	SM	SM	CL
LIQUID LIMIT	--	--	30
PLASTIC LIMIT	--	--	21
PLASTICITY INDEX	--	--	9
GRAIN SIZE DISTRIBUTION (%)			
GRAVEL	0.0	0.0	0.0
SAND	63.5	50.7	37.1
SILT	25.5	42.8	39.2
CLAY (2µm to 5µm)	5.1	3.7	6.5
CLAY (≤2µm)	5.9	2.8	17.2

BORING AND DEPTH	B-13 @ 12.5'	B-13 @ 17.5'	B-15 @ 10'
USCS	ML	SM	SM
LIQUID LIMIT	33	29	--
PLASTIC LIMIT	25	24	--
PLASTICITY INDEX	8	5	Non-Plastic
GRAIN SIZE DISTRIBUTION (%)			
GRAVEL	0.0	0.0	0.0
SAND	24.8	56.9	72.4
SILT	53.4	22.0	16.2
CLAY (2µm to 5µm)	9.7	5.5	3.0
CLAY (≤2µm)	12.1	15.6	8.4

BORING AND DEPTH	B-15 @ 20'	B-16 @ 10'	B-16 @ 25'
USCS	SM	SM	SP
LIQUID LIMIT	--	--	--
PLASTIC LIMIT	--	--	--
PLASTICITY INDEX	Non-Plastic	Non-Plastic	--
GRAIN SIZE DISTRIBUTION (%)			
GRAVEL	0.0	0.0	0.2
SAND	52.6	69.6	87.7
SILT	32.9	20.6	7.2
CLAY (2µm to 5µm)	3.0	1.4	3.1
CLAY (≤2µm)	11.5	8.4	1.8

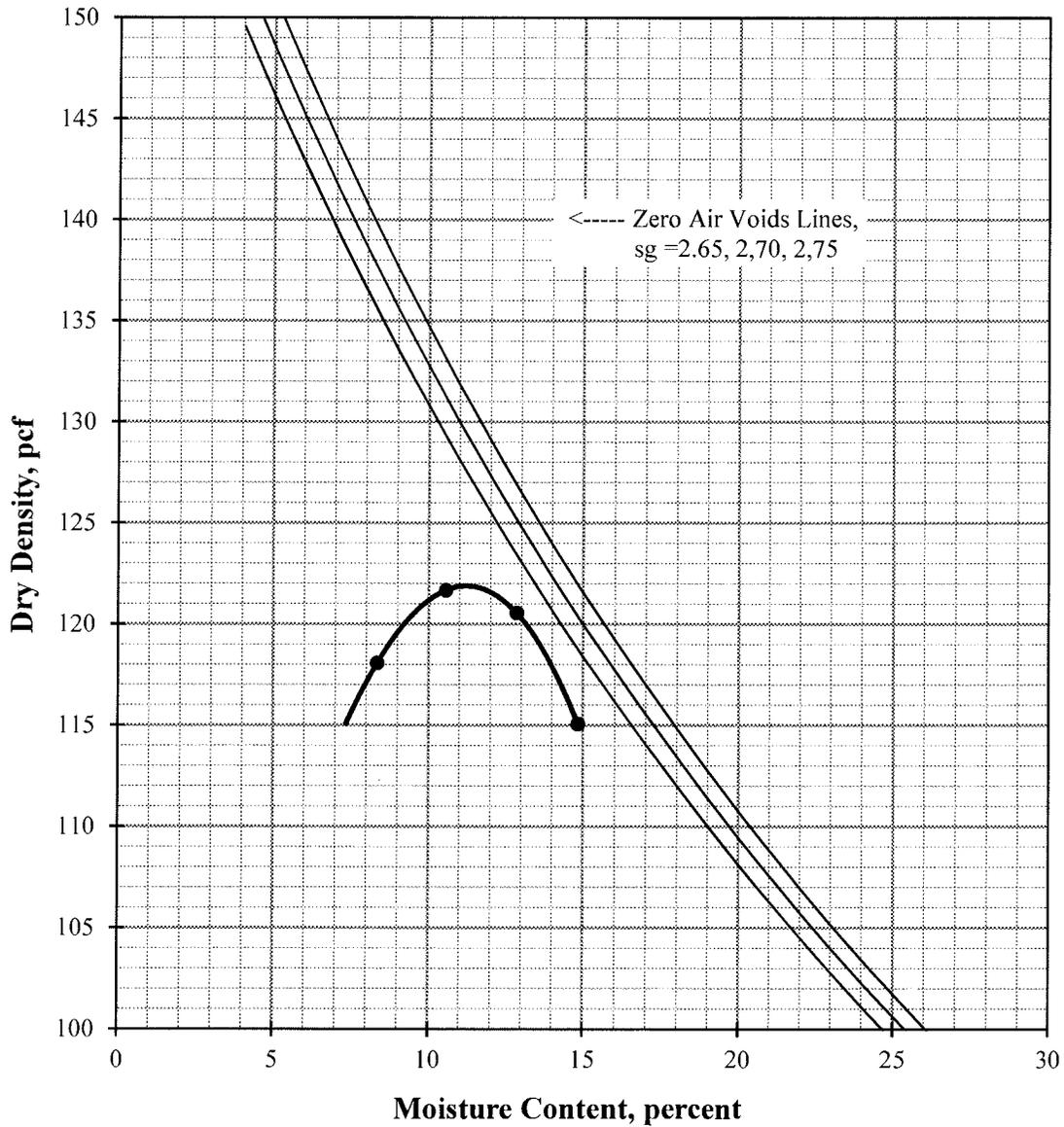
MAXIMUM DENSITY / OPTIMUM MOISTURE

ASTM D 1557-12 (Modified)

Job Name: Doris & Patterson Middle School
 Sample ID: B 3 @ 0-5'
 Location:
 Description: Very Dark Grayish Brown Sandy Silt
 SG: 2.50

Procedure Used: A
 Prep. Method: Moist
 Rammer Type: Automatic

		Sieve Size	% Retained
Maximum Density:	122 pcf	3/4"	0.0
Optimum Moisture:	11%	3/8"	0.0
		#4	0.0



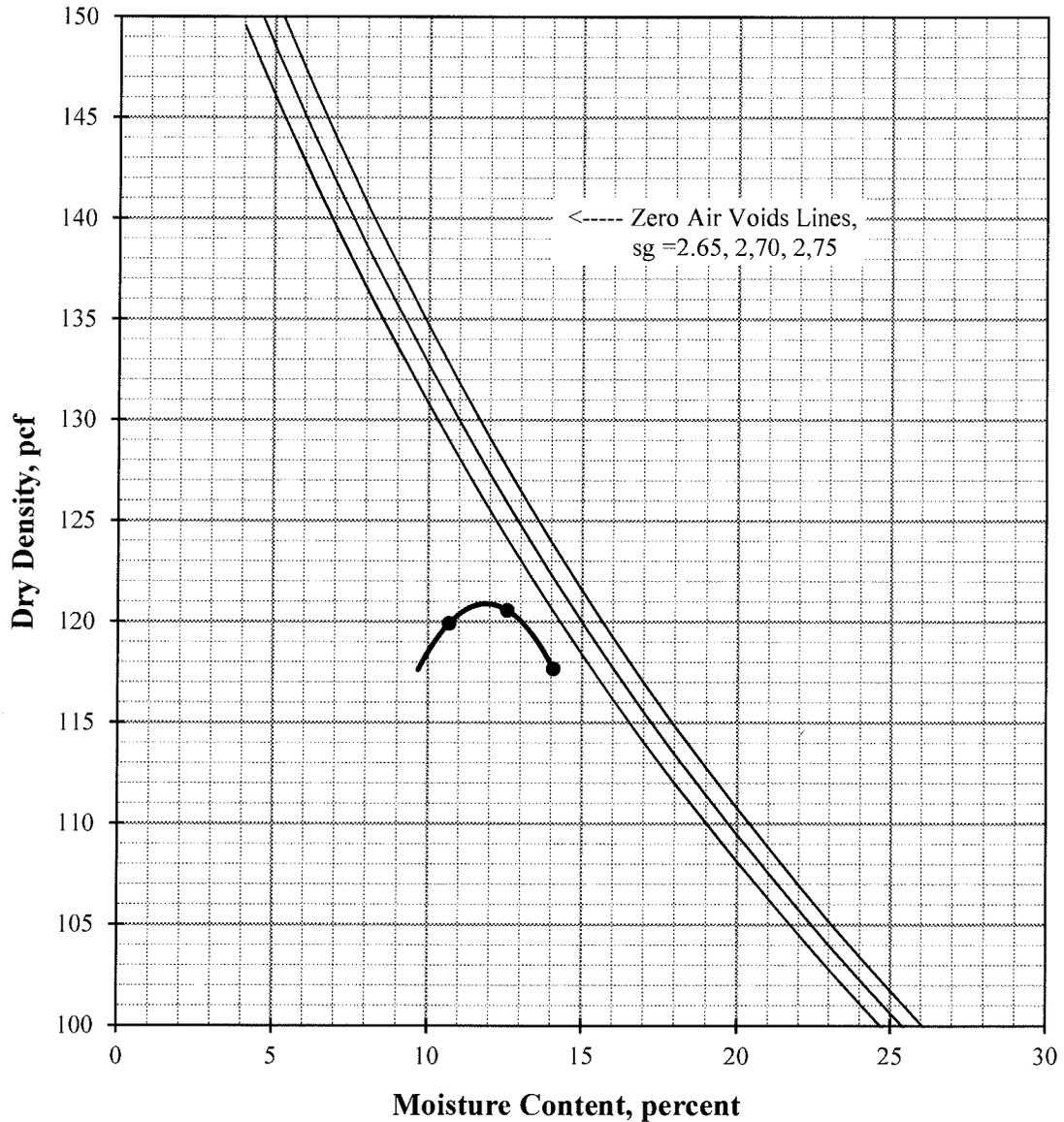
MAXIMUM DENSITY / OPTIMUM MOISTURE

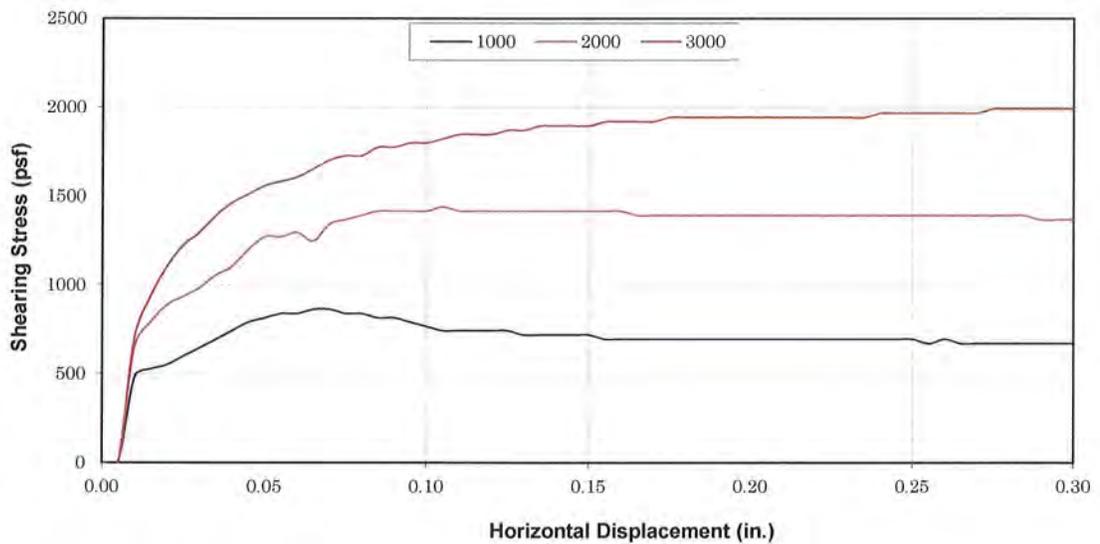
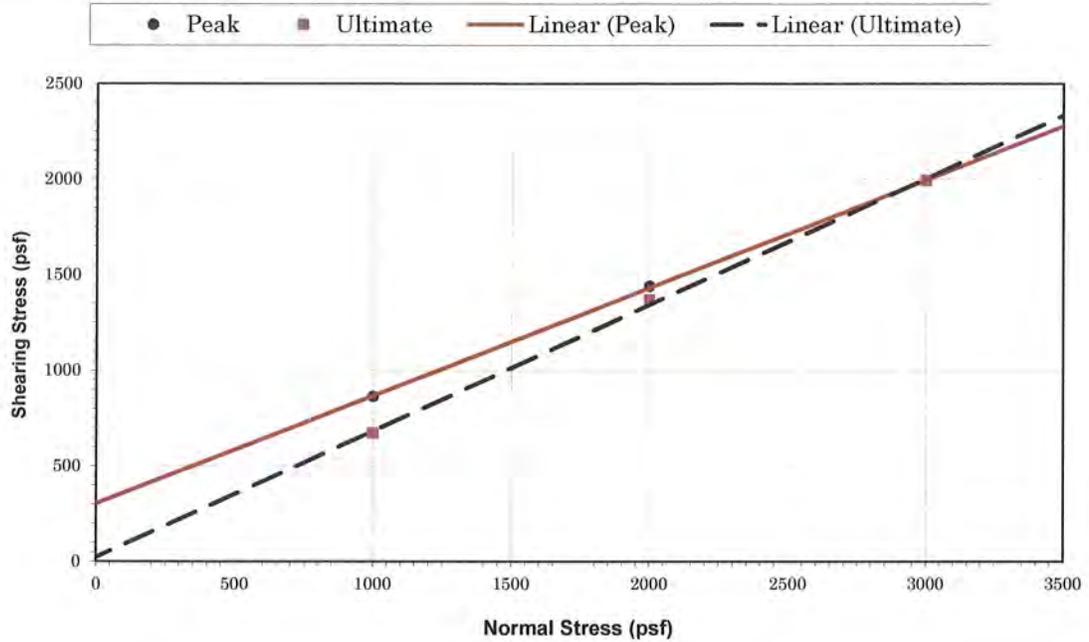
ASTM D 1557-12 (Modified)

Job Name: Doris & Patterson Middle School
 Sample ID: B 8 @ 0-5'
 Location:
 Description: Dark Grayish Brown Sandy Silt
 SG: 2.50

Procedure Used: A
 Prep. Method: Moist
 Rammer Type: Automatic

Maximum Density:	121 pcf	<u>Sieve Size</u>	<u>% Retained</u>
Optimum Moisture:	12%	3/4"	0.0
		3/8"	0.0
		#4	0.3





DIRECT SHEAR DATA*

Sample Location: B 3 @ 0-5'
 Sample Description: Sandy Silt
 Dry Density (pcf): 110.0
 Initial % Moisture: 11.2
 Average Degree of Saturation: 95.8
 Shear Rate (in/min): 0.0109 in/min

Normal stress (psf)	1000	2000	3000
Peak stress (psf)	864	1440	1992
Ultimate stress (psf)	672	1368	1992

	Peak	Ultimate
ϕ Angle of Friction (degrees):	29	33
c Cohesive Strength (psf):	300	20
Test Type: Peak & Ultimate		

* Test Method: ASTM D-3080

DIRECT SHEAR TEST

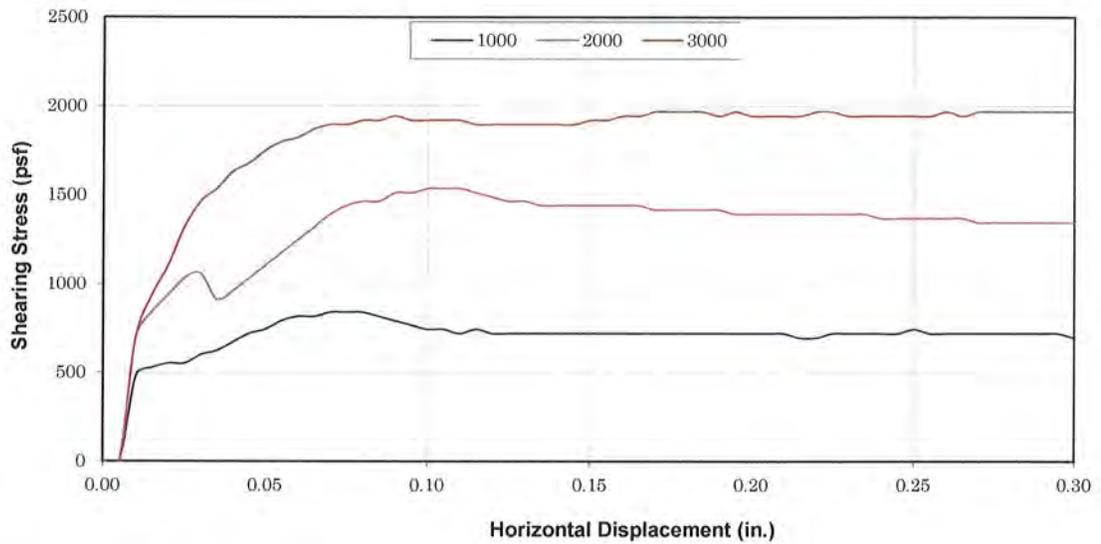
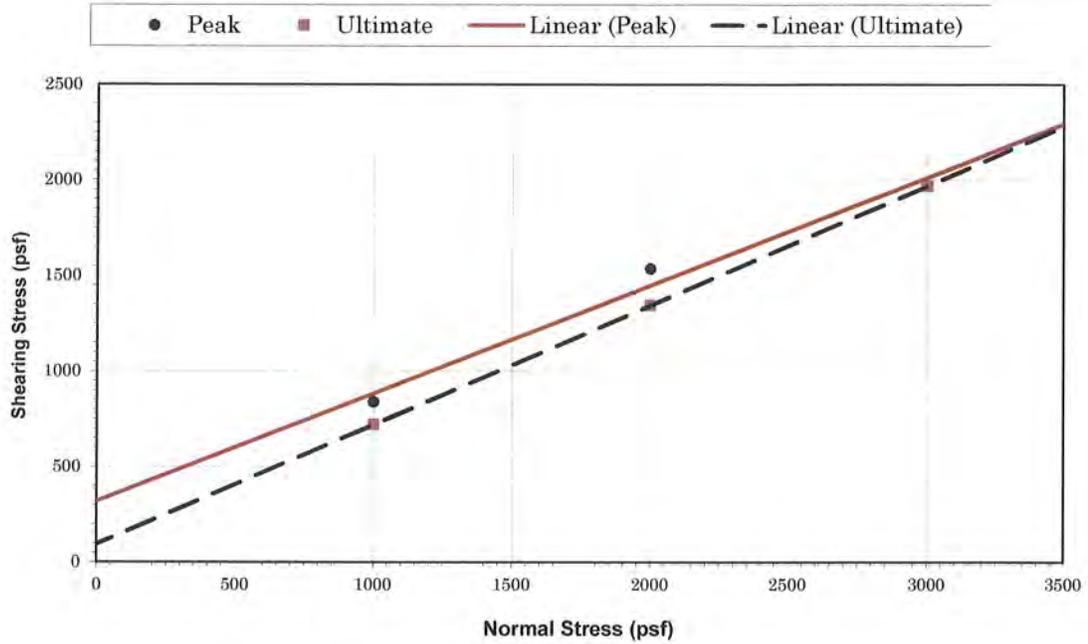
Doris & Patterson Middle School



Earth Systems
Southern California

9/27/2017

VT-24867-10



DIRECT SHEAR DATA *

Sample Location: B 8 @ 0-5'
 Sample Description: Sandy Silt
 Dry Density (pcf): 109.2
 Initial % Moisture: 11.8
 Average Degree of Saturation: 98.7
 Shear Rate (in/min): 0.008 in/min

Normal stress (psf)	1000	2000	3000
Peak stress (psf)	840	1536	1968
Ultimate stress (psf)	720	1344	1968

	Peak	Ultimate
ϕ Angle of Friction (degrees):	29	32
c Cohesive Strength (psf):	320	90
Test Type: Peak & Ultimate		

* Test Method: ASTM D-3080

DIRECT SHEAR TEST

Doris & Patterson Middle School



Earth Systems
 Southern California

9/27/2017

VT-24867-10

EXPANSION INDEX

ASTM D-4829, UBC 18-2

Job Name: Doris & Patterson Middle School
Sample ID: B 3 @ 0-5'
Soil Description: ML

Initial Moisture, %: 10.6
Initial Compacted Dry Density, pcf: 106.9
Initial Saturation, %: 50
Final Moisture, %: 21.6
Volumetric Swell, %: 2.4

Expansion Index: 24 Low

EI	UBC Classification
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
130+	Very High

EXPANSION INDEX

ASTM D-4829, UBC 18-2

Job Name: Doris & Patterson Middle School
Sample ID: B 8 @ 0-5'
Soil Description: ML

Initial Moisture, %: 10.6
Initial Compacted Dry Density, pcf: 106.6
Initial Saturation, %: 50
Final Moisture, %: 19.8
Volumetric Swell, %: 0.0

Expansion Index: 0 Very Low

EI	UBC Classification
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
130+	Very High

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 12 @ 7.5'**
Soil Description: **ML**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	694
Corrected Wt., g:	694.0

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g:	60.4
Corrected Wt., g:	60.4
Calculation Factor	0.6040

Hydrometer Analysis for < #10 Material

Start time:	8:00:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:00:20 AM	41	24	3.5	37.5
1 hour	9:00:00 AM	17	24	3.5	13.5
6 hour	2:00:00 PM	8	24	3.5	4.5

% Gravel:	0.0
% Sand(2mm - 74µm):	37.9
% Silt(74µm- 5µm):	39.7
% Clay(5µm - 2µm):	14.9
% Clay(≤2µm):	7.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 12 @ 17.5'**
Soil Description: **CL**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	462.8
Corrected Wt., g:	462.8

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.8	0.17	99.83

Air Dry Hydro Sample Wt., g:	61.1
Corrected Wt., g:	61.1
Calculation Factor	0.6120

Hydrometer Analysis for < #10 Material

Start time:	8:06:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:06:20 AM	52	24	3.5	48.5
1 hour	9:06:00 AM	23	24	3.5	19.5
6 hour	2:06:00 PM	18	24	3.5	14.5

% Gravel:	0.0
% Sand(2mm - 74µm):	20.8
% Silt(74µm- 5µm):	47.3
% Clay(5µm - 2µm):	8.2
% Clay(≤2µm):	23.7

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School

Job No.: VT-24867-10

Sample ID: **B 12 @ 22.5'**

Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g: 100.0

Oven Dry Wt, g: 100.0

% Moisture: 0.0

Air Dry Sample Wt., g: 439.2

Corrected Wt., g: 439.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g: 58.9

Corrected Wt., g: 58.9

Calculation Factor: 0.5890

Hydrometer Analysis for < #10 Material

Start time: 7:54:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	7:54:20 AM	25	24	3.5	21.5
1 hour	8:54:00 AM	10	24	3.5	6.5
6 hour	1:54:00 PM	7	24	3.5	3.5

% Gravel:	0.0
% Sand(2mm - 74µm):	63.5
% Silt(74µm- 5µm):	25.5
% Clay(5µm - 2µm):	5.1
% Clay(≤2µm):	5.9

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 12 @ 42.5'**
Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	377.1
Corrected Wt., g:	377.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.3	0.08	99.92
#10	0.5	0.13	99.87

Air Dry Hydro Sample Wt., g:	53.7
Corrected Wt., g:	53.7
Calculation Factor	0.5377

Hydrometer Analysis for < #10 Material

Start time:	7:44:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	7:44:20 AM	30	24	3.5	26.5
1 hour	8:44:00 AM	7	24	3.5	3.5
6 hour	1:44:00 PM	5	24	3.5	1.5

% Gravel:	0.0
% Sand(2mm - 74µm):	50.7
% Silt(74µm- 5µm):	42.8
% Clay(5µm - 2µm):	3.7
% Clay(≤2µm):	2.8

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 12 @ 55'**
Soil Description: **CL**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	371.3
Corrected Wt., g:	371.3

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g:	61.2
Corrected Wt., g:	61.2
Calculation Factor	0.6120

Hydrometer Analysis for < #10 Material

Start time: 8:13:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	8:13:20 AM	42	24	3.5	38.5
1 hour	9:13:00 AM	18	24	3.5	14.5
6 hour	2:13:00 PM	14	24	3.5	10.5

% Gravel:	0.0
% Sand(2mm - 74µm):	37.1
% Silt(74µm- 5µm):	39.2
% Clay(5µm - 2µm):	6.5
% Clay(≤2µm):	17.2

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 13 @ 12.5'**
Soil Description: **ML**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	382.1
Corrected Wt., g:	382.1

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.1	0.03	99.97
#10	0.1	0.03	99.97

Air Dry Hydro Sample Wt., g:	61.8
Corrected Wt., g:	61.8
Calculation Factor	0.6182

Hydrometer Analysis for < #10 Material

Start time:	7:38:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	7:38:20 AM	50	24	3.5	46.5
1 hour	8:38:00 AM	17	24	3.5	13.5
6 hour	1:38:00 PM	11	24	3.5	7.5

% Gravel:	0.0
% Sand(2mm - 74µm):	24.8
% Silt(74µm- 5µm):	53.4
% Clay(5µm - 2µm):	9.7
% Clay(≤2µm):	12.1

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 13 @ 17.5'**
Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	453.2
Corrected Wt., g:	453.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.0	0.00	100.00

Air Dry Hydro Sample Wt., g:	54.5
Corrected Wt., g:	54.5
Calculation Factor	0.5450

Hydrometer Analysis for < #10 Material

Start time:	7:49:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	7:49:20 AM	27	24	3.5	23.5
1 hour	8:49:00 AM	15	24	3.5	11.5
6 hour	1:49:00 PM	12	24	3.5	8.5

% Gravel:	0.0
% Sand(2mm - 74µm):	56.9
% Silt(74µm- 5µm):	22.0
% Clay(5µm - 2µm):	5.5
% Clay(≤2µm):	15.6

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 15 @ 10'**
Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	700.4
Corrected Wt., g:	700.4

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.9	0.13	99.87
#10	1.3	0.19	99.81

Air Dry Hydro Sample Wt., g:	67.7
Corrected Wt., g:	67.7
Calculation Factor	0.6783

Hydrometer Analysis for < #10 Material

Start time:	10:21:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	10:21:20 AM	22	25	3.3	18.7
1 hour	11:21:00 AM	11	25	3.3	7.7
6 hour	4:21:00 PM	9	25	3.3	5.7

% Gravel:	0.0
% Sand(2mm - 74µm):	72.4
% Silt(74µm- 5µm):	16.2
% Clay(5µm - 2µm):	3.0
% Clay(≤2µm):	8.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 15 @ 20'**
Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	609.2
Corrected Wt., g:	609.2

Sieve Analysis for + #10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.4	0.07	99.93
#10	0.5	0.08	99.92

Air Dry Hydro Sample Wt., g:	66.8
Corrected Wt., g:	66.8
Calculation Factor	0.6685

Hydrometer Analysis for < #10 Material

Start time:	10:27:00 AM				
Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	10:27:20 AM	35	25	3.3	31.7
1 hour	11:27:00 AM	13	25	3.3	9.7
6 hour	4:27:00 PM	11	25	3.3	7.7

% Gravel:	0.0
% Sand(2mm - 74µm):	52.6
% Silt(74µm- 5µm):	32.9
% Clay(5µm - 2µm):	3.0
% Clay(≤2µm):	11.5

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School
Job No.: VT-24867-10
Sample ID: **B 16 @ 10'**
Soil Description: **SM**

Hydroscopic Moisture

Air Dry Wt, g:	100.0
Oven Dry Wt, g	100.0
% Moisture:	0.0
Air Dry Sample Wt., g:	691.6
Corrected Wt., g:	691.6

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.0	0.00	100.00
#8	0.0	0.00	100.00
#10	0.1	0.01	99.99

Air Dry Hydro Sample Wt., g:	68.1
Corrected Wt., g:	68.1
Calculation Factor	0.6811

Hydrometer Analysis for <#10 Material

Start time: 10:33:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	10:33:20 AM	24	25	3.3	20.7
1 hour	11:33:00 AM	10	25	3.3	6.7
6 hour	4:33:00 PM	9	25	3.3	5.7

% Gravel:	0.0
% Sand(2mm - 74µm):	69.6
% Silt(74µm- 5µm):	20.6
% Clay(5µm - 2µm):	1.4
% Clay(≤2µm):	8.4

MECHANICAL ANALYSIS

CTM 203-08

Job Name: Doris & Patterson Middle School

Job No.: VT-24867-10

Sample ID: **B 16 @ 25'**

Soil Description: **SP**

Hydroscopic Moisture

Air Dry Wt, g: 100.0
Oven Dry Wt, g: 100.0
% Moisture: 0.0

Air Dry Sample Wt., g: 463.1
Corrected Wt., g: 463.1

Sieve Analysis for +#10 Material

Sieve Size	Wt Ret	% Ret	% Passing
1/2 inch	0.0	0.00	100.00
3/8 inch	0.0	0.00	100.00
#4	0.7	0.15	99.85
#8	1.3	0.28	99.72
#10	1.5	0.32	99.68

Air Dry Hydro Sample Wt., g: 96.3
Corrected Wt., g: 96.3
Calculation Factor: 0.9661

Hydrometer Analysis for <#10 Material

Start time: 10:38:00 AM

Short Hydro	Time of Reading	Hydro Reading	Temp. at Reading, °C	Correction Factor	Corrected Hydro Reading
20 sec	10:38:20 AM	15	25	3.3	11.7
1 hour	11:38:00 AM	8	25	3.3	4.7
6 hour	4:38:00 PM	5	25	3.3	1.7

% Gravel:	0.2
% Sand(2mm - 74µm):	87.7
% Silt(74µm- 5µm):	7.2
% Clay(5µm - 2µm):	3.1
% Clay(≤2µm):	1.8

PLASTICITY INDEX

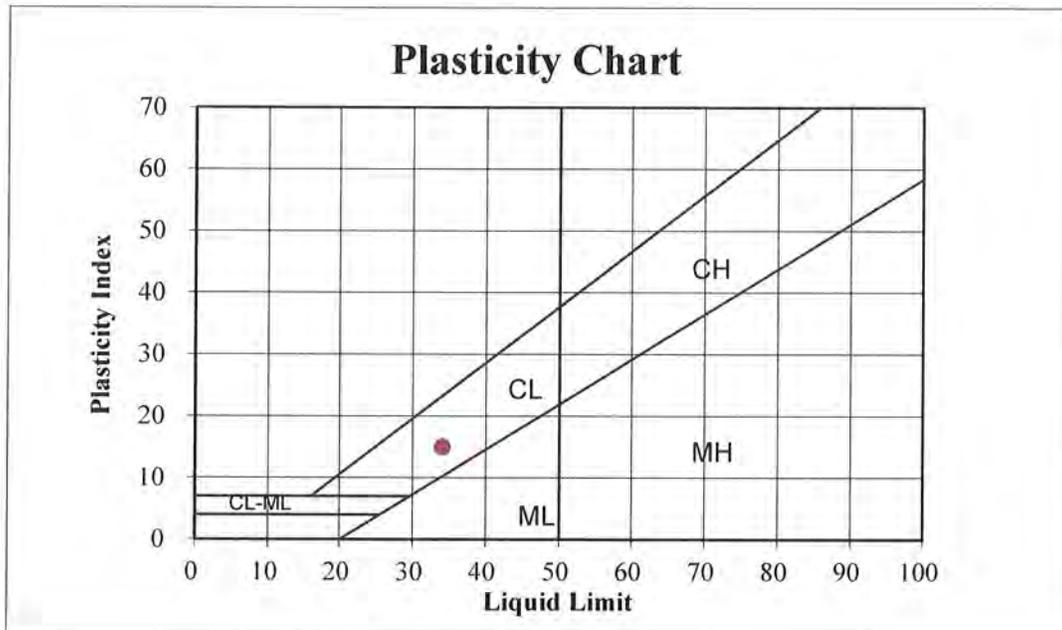
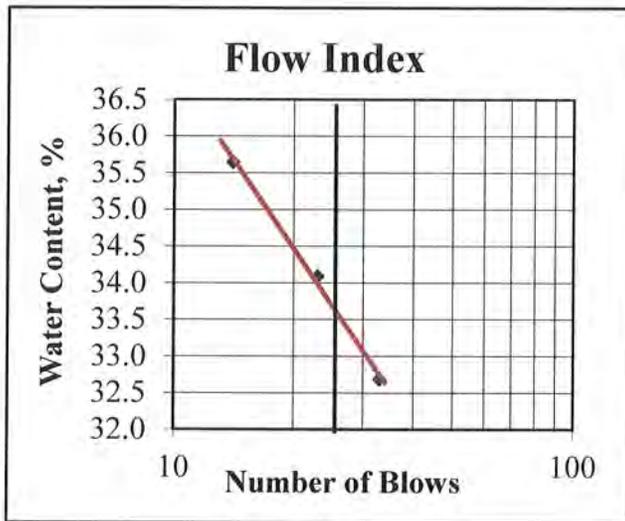
ASTM D-4318

Job Name: Doris & Patterson Middle School
 Sample ID: B 12 @ 17.5'
 Soil Description: CL

DATA SUMMARY

TEST RESULTS

Number of Blows:	14	23	33	LIQUID LIMIT	34
Water Content, %	35.6	34.1	32.7	PLASTIC LIMIT	19
Plastic Limit:	19.0	18.6		PLASTICITY INDEX	15



PLASTICITY INDEX

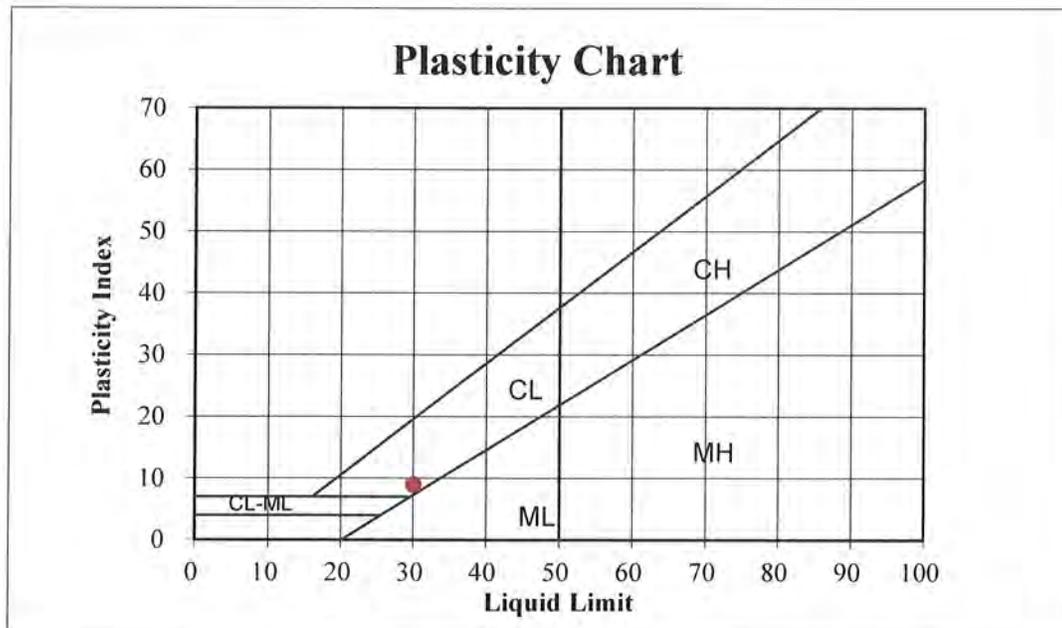
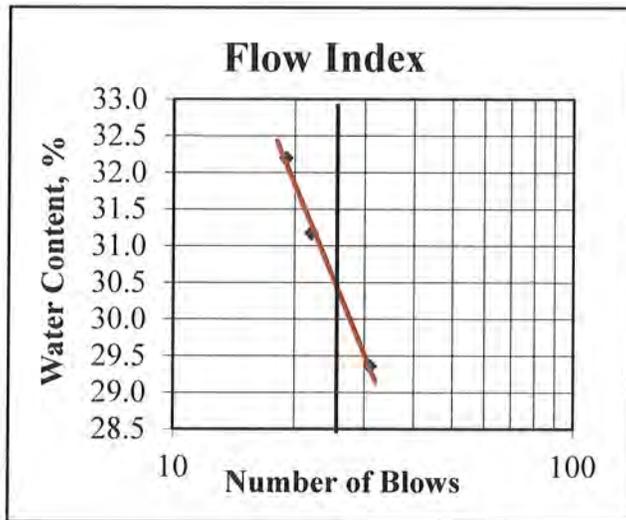
ASTM D-4318

Job Name: Doris & Patterson Middle School
 Sample ID: B 12 @ 55'
 Soil Description: CL

DATA SUMMARY

TEST RESULTS

Number of Blows:	19	22	31	LIQUID LIMIT	30
Water Content, %	32.2	31.2	29.4	PLASTIC LIMIT	21
Plastic Limit:	21.0	21.3		PLASTICITY INDEX	9



PLASTICITY INDEX

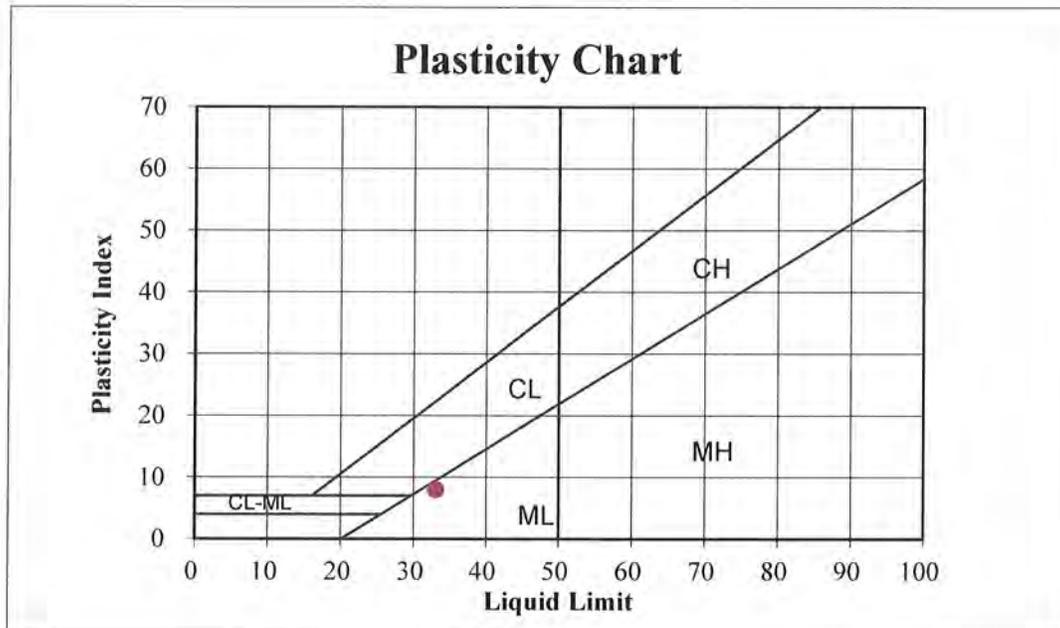
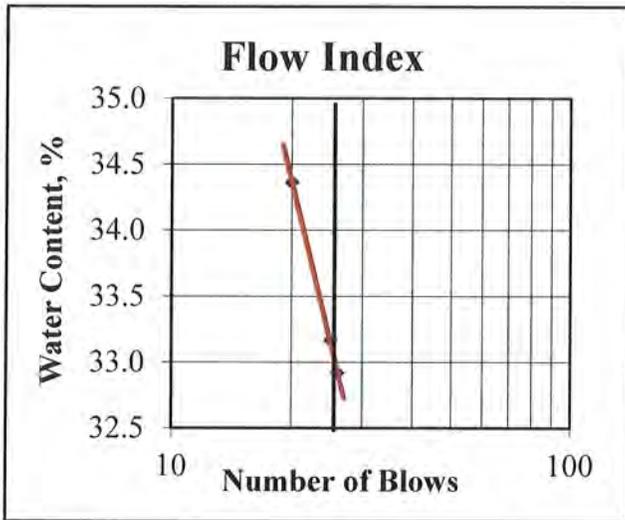
ASTM D-4318

Job Name: Doris & Patterson Middle School
 Sample ID: B 13 @ 12.5'
 Soil Description: ML

DATA SUMMARY

TEST RESULTS

Number of Blows:	20	25	26	LIQUID LIMIT	33
Water Content, %	34.4	33.2	32.9	PLASTIC LIMIT	25
Plastic Limit:	24.6	24.7		PLASTICITY INDEX	8



PLASTICITY INDEX

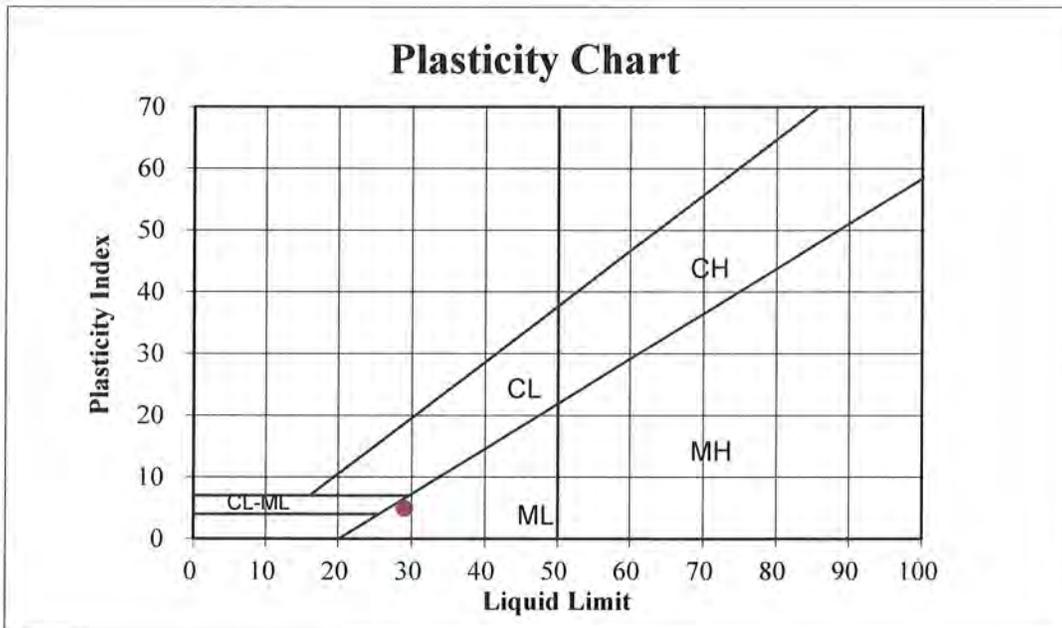
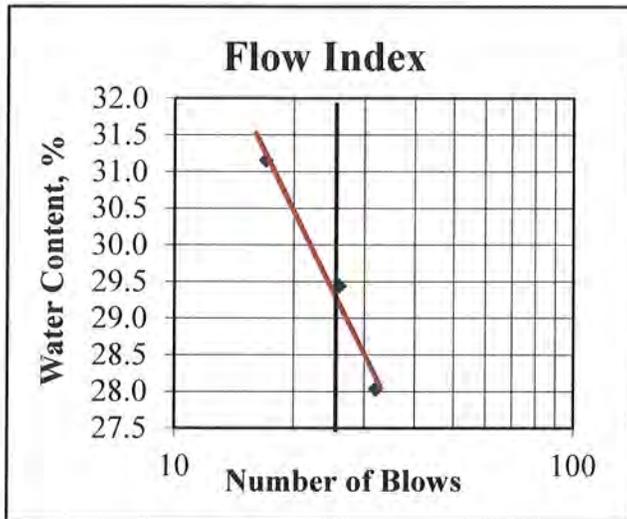
ASTM D-4318

Job Name: Doris & Patterson Middle School
 Sample ID: B 13 @ 17.5'
 Soil Description: SM

DATA SUMMARY

TEST RESULTS

Number of Blows:	17	26	32	LIQUID LIMIT	29
Water Content, %	31.2	29.4	28.0	PLASTIC LIMIT	24
Plastic Limit:	24.6	24.0		PLASTICITY INDEX	5

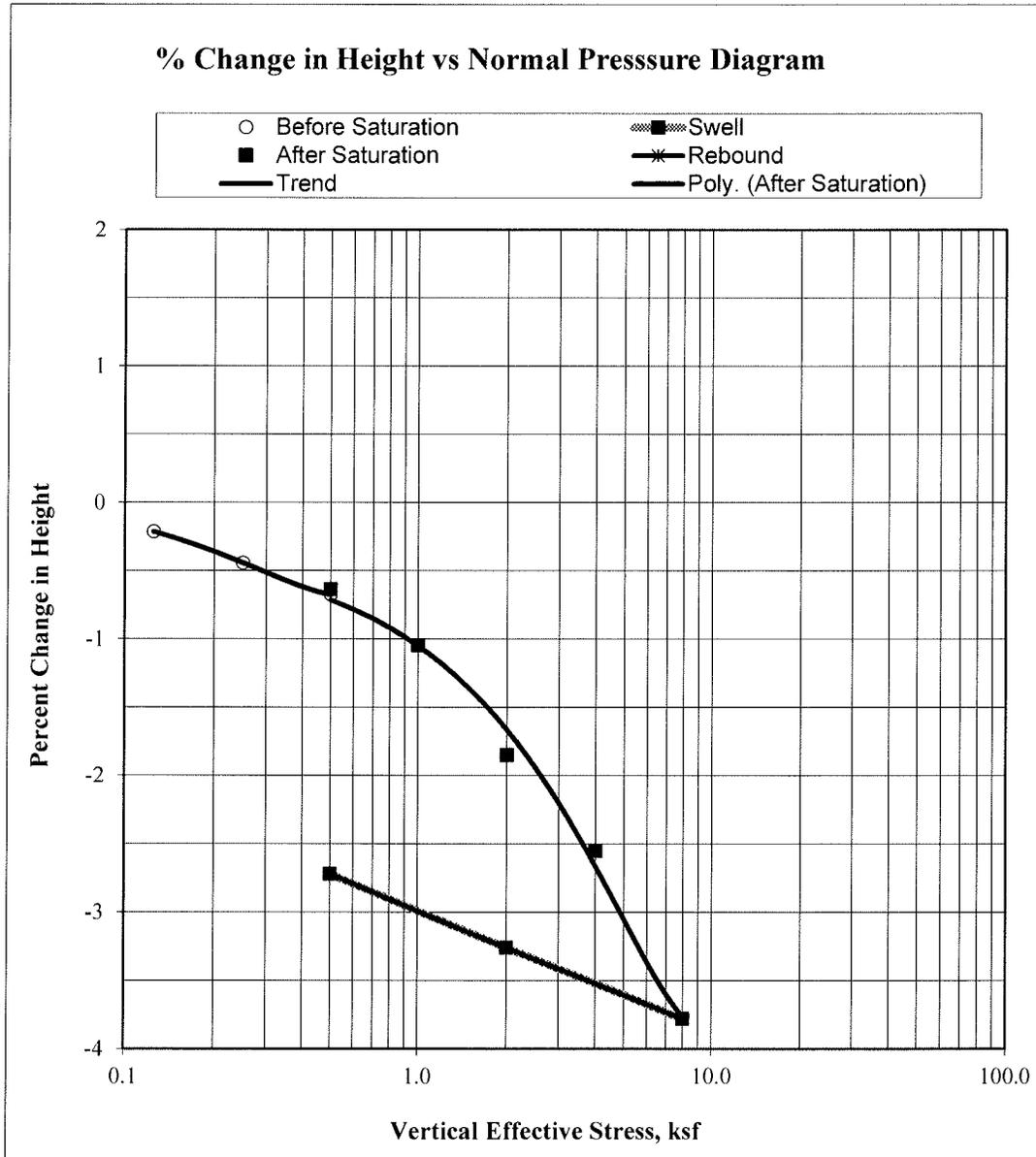


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 2 @ 5'
 SM/ML
 Ring Sample

Initial Dry Density: 108.9 pcf
 Initial Moisture, %: 11.8%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.531

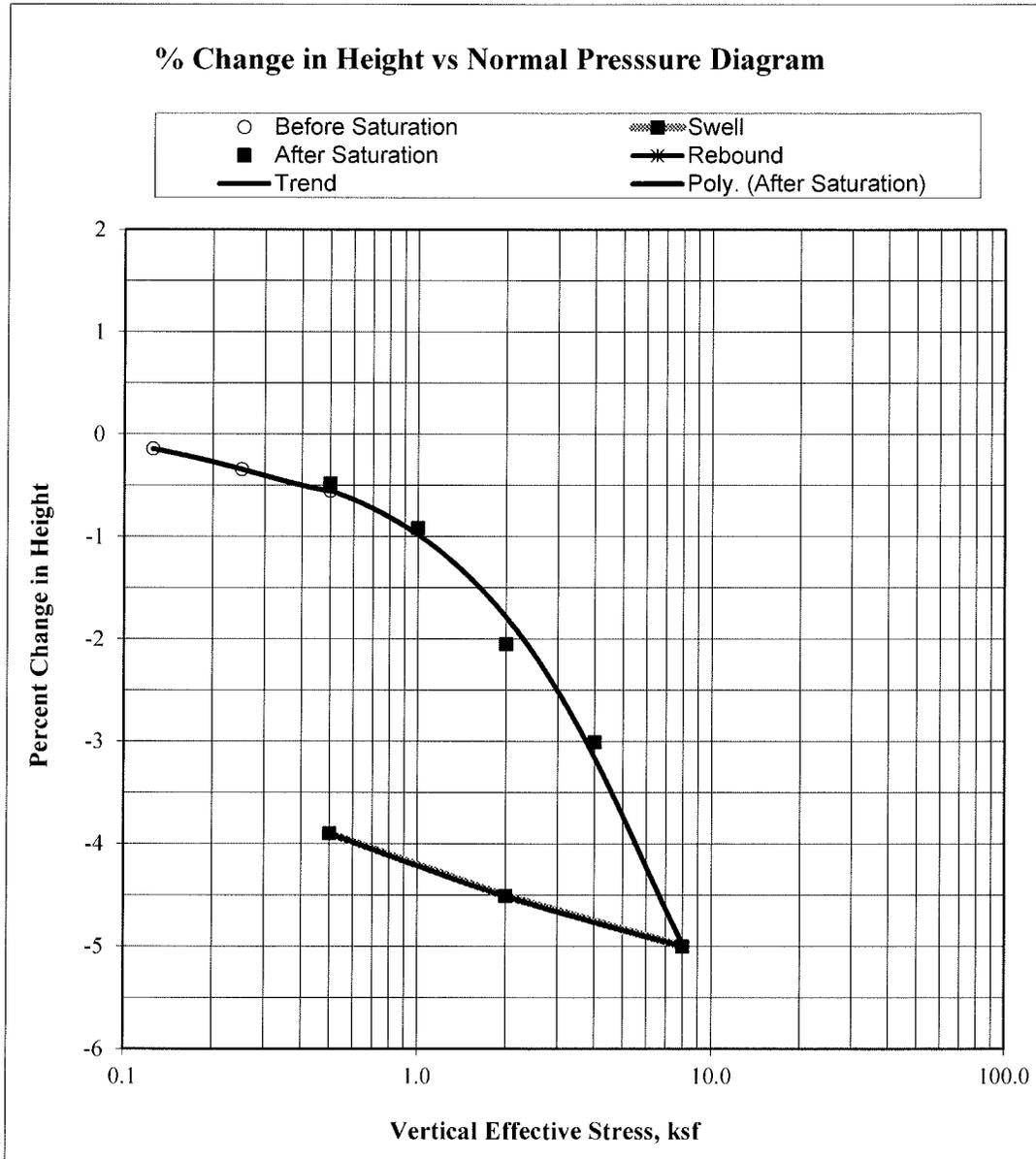


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 3 @ 5'
 SM/ML
 Ring Sample

Initial Dry Density: 97.6 pcf
 Initial Moisture, %: 22.5%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.707

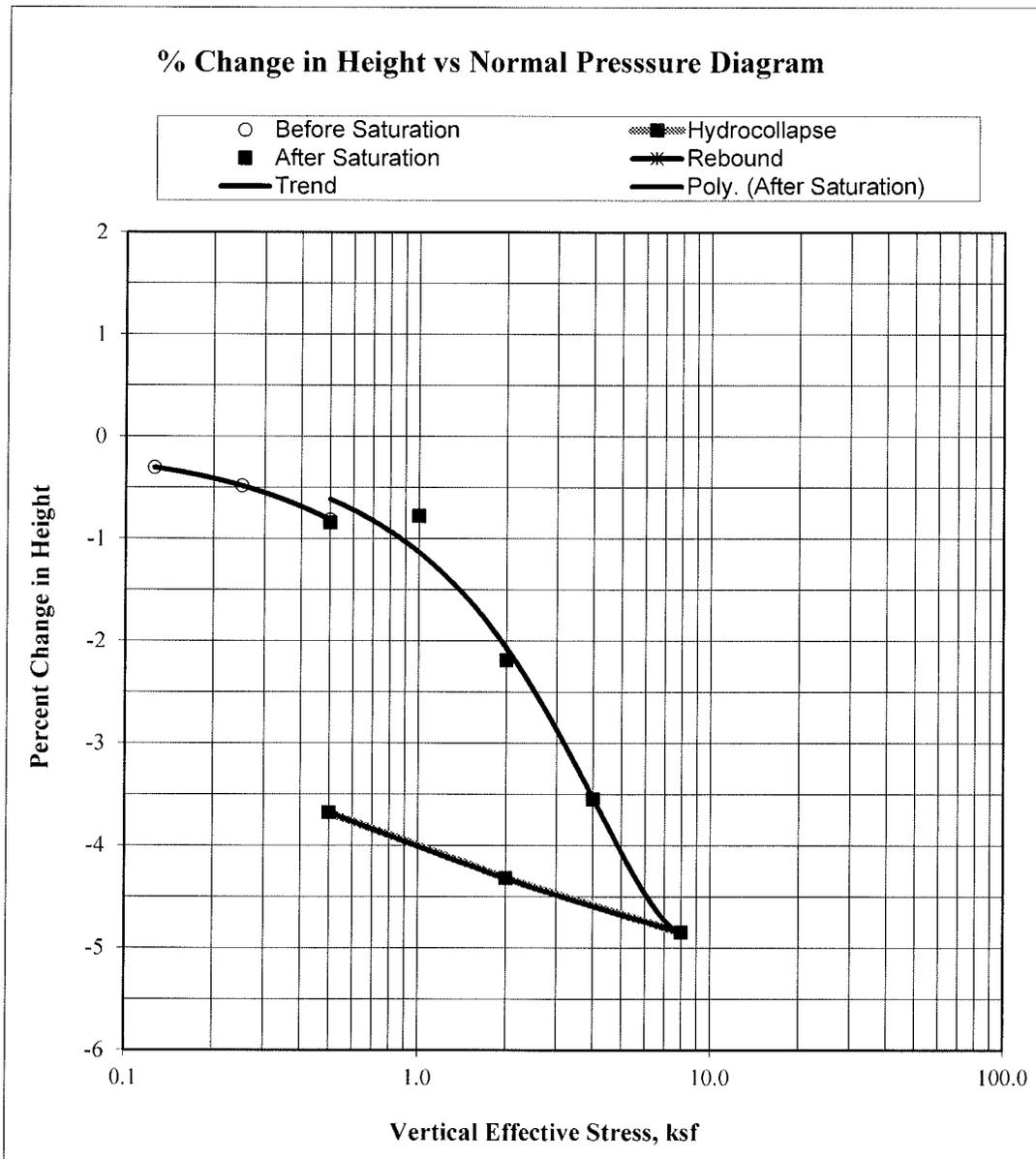


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 5 @ 5'
 ML
 Ring Sample

Initial Dry Density: 102.7 pcf
 Initial Moisture, %: 24.4%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.623

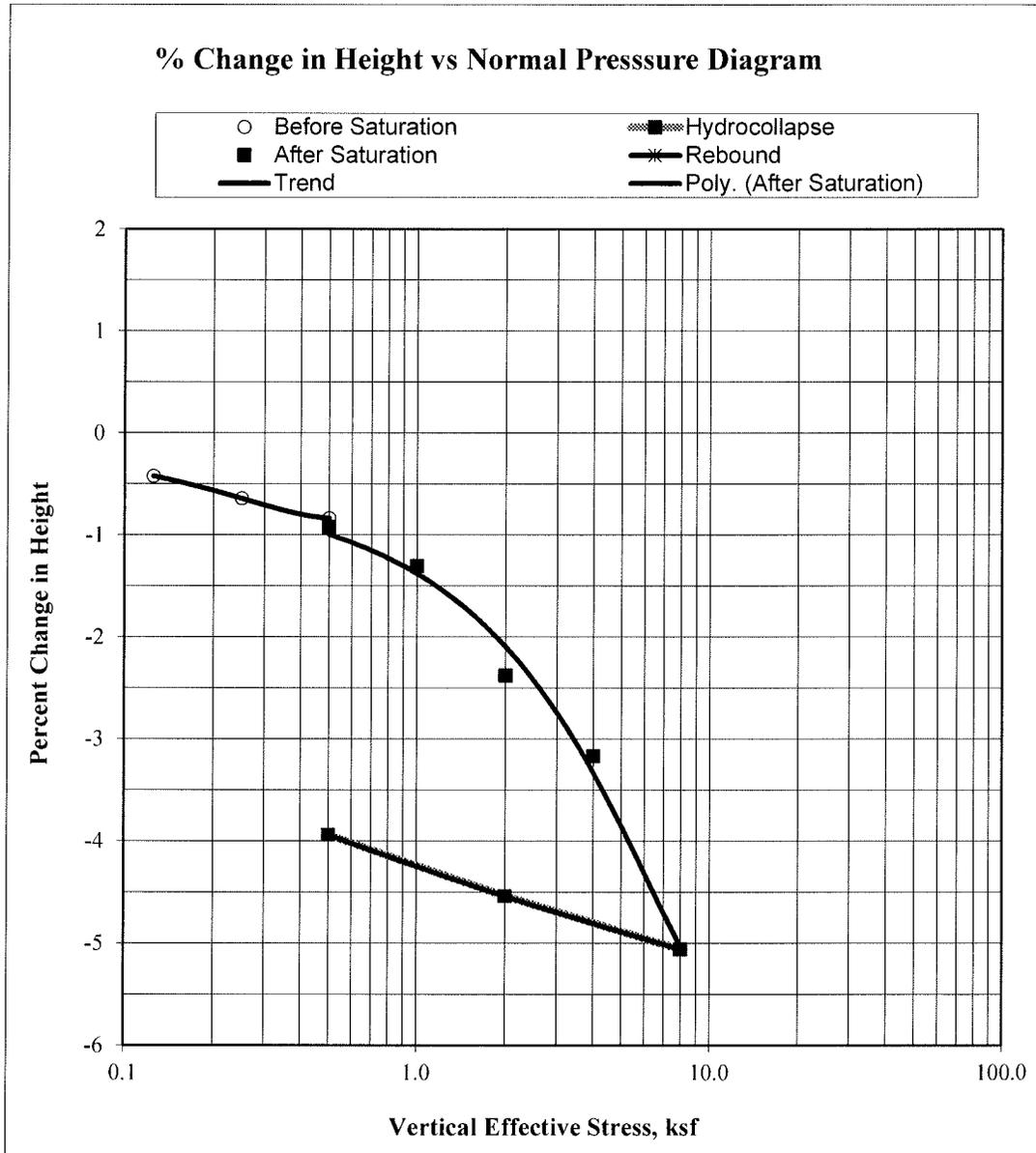


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 6 @ 5'
 ML
 Ring Sample

Initial Dry Density: 101.7 pcf
 Initial Moisture, %: 21.9%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.639

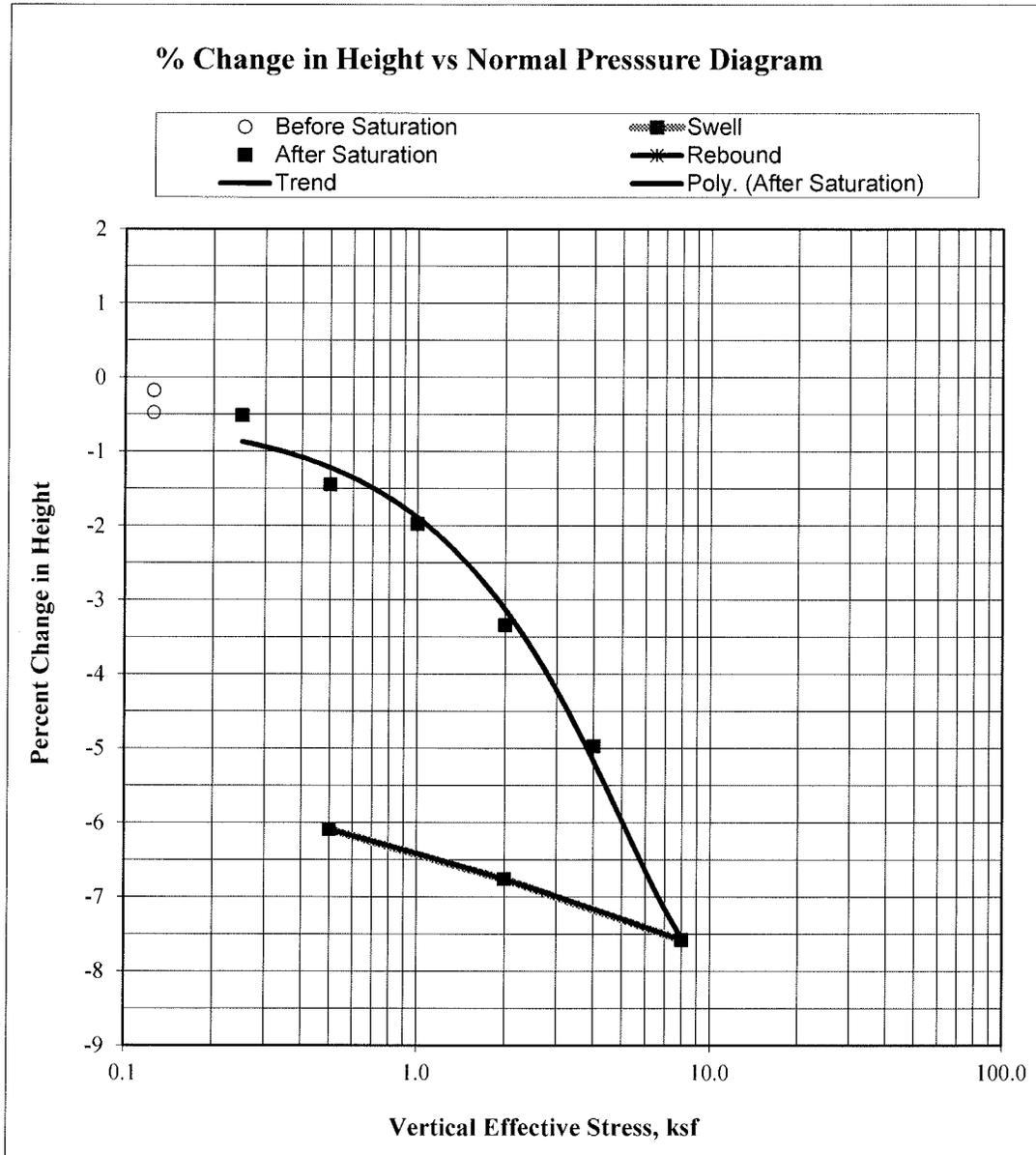


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 8 @ 5'
 ML
 Ring Sample

Initial Dry Density: 102.5 pcf
 Initial Moisture, %: 22.6%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.627

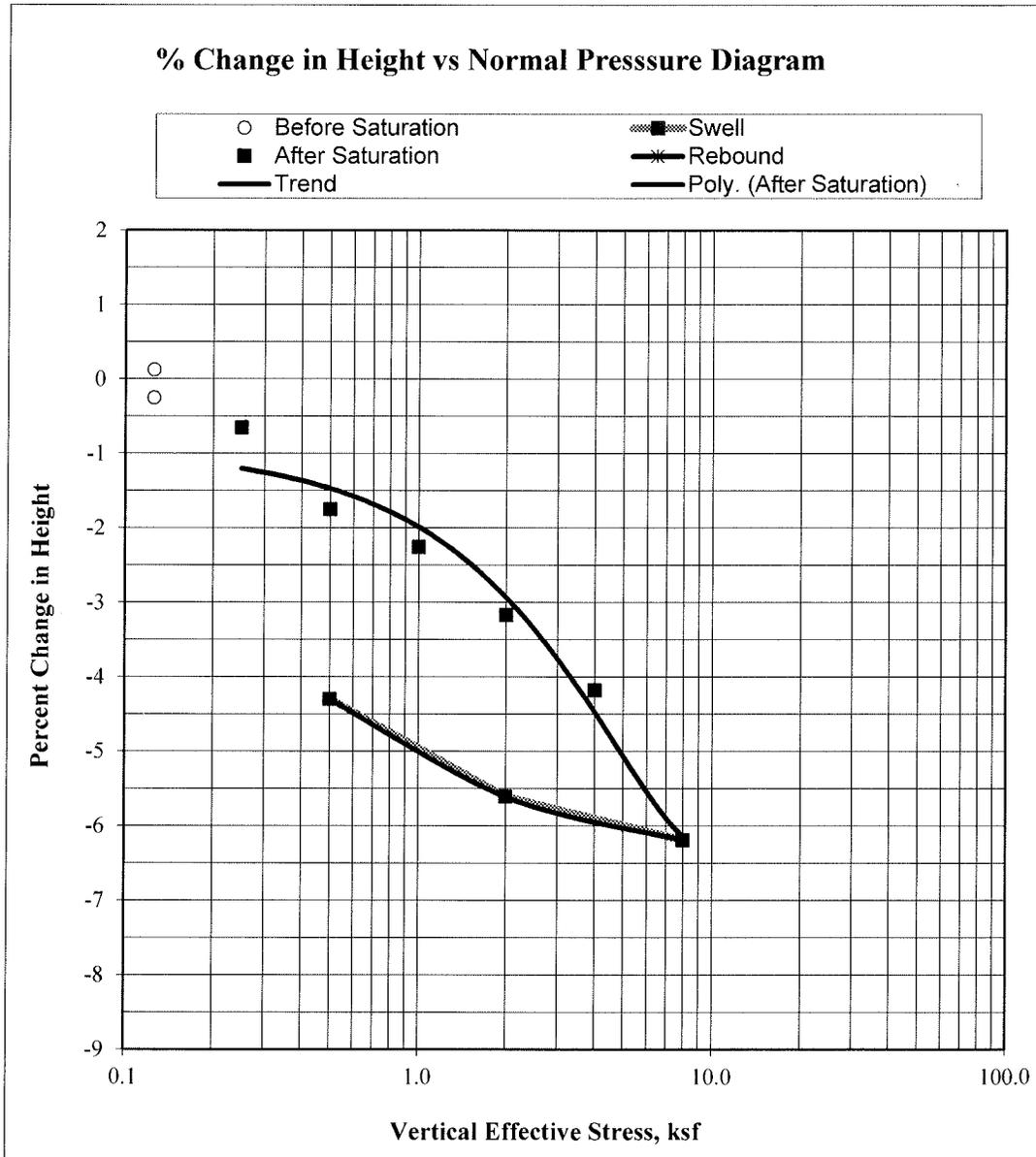


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 9 @ 5'
 ML
 Ring Sample

Initial Dry Density: 102.2 pcf
 Initial Moisture, %: 22.8%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.630

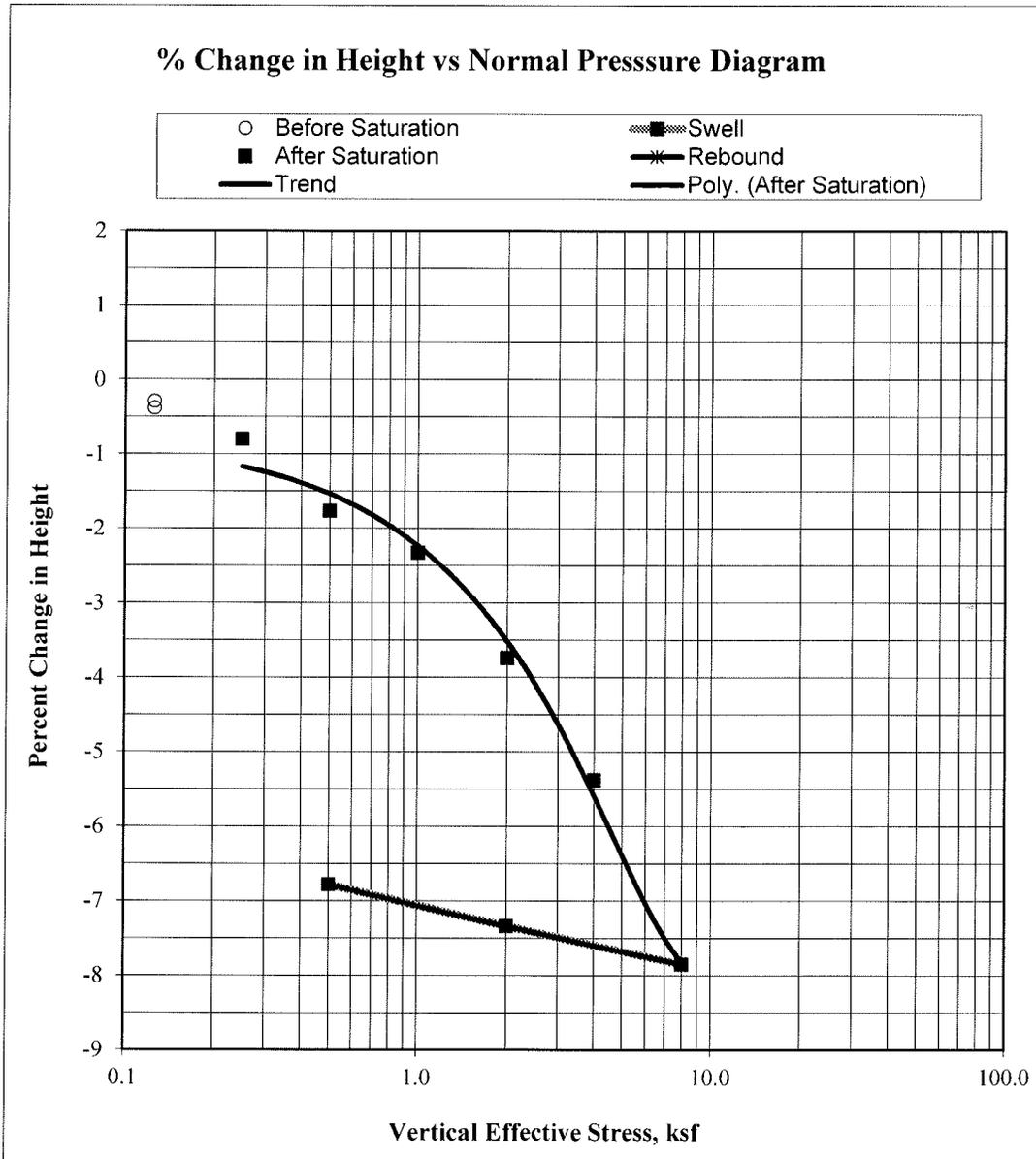


CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 9 @ 10'
 ML/SM
 Ring Sample

Initial Dry Density: 102.5 pcf
 Initial Moisture, %: 23.6%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.626

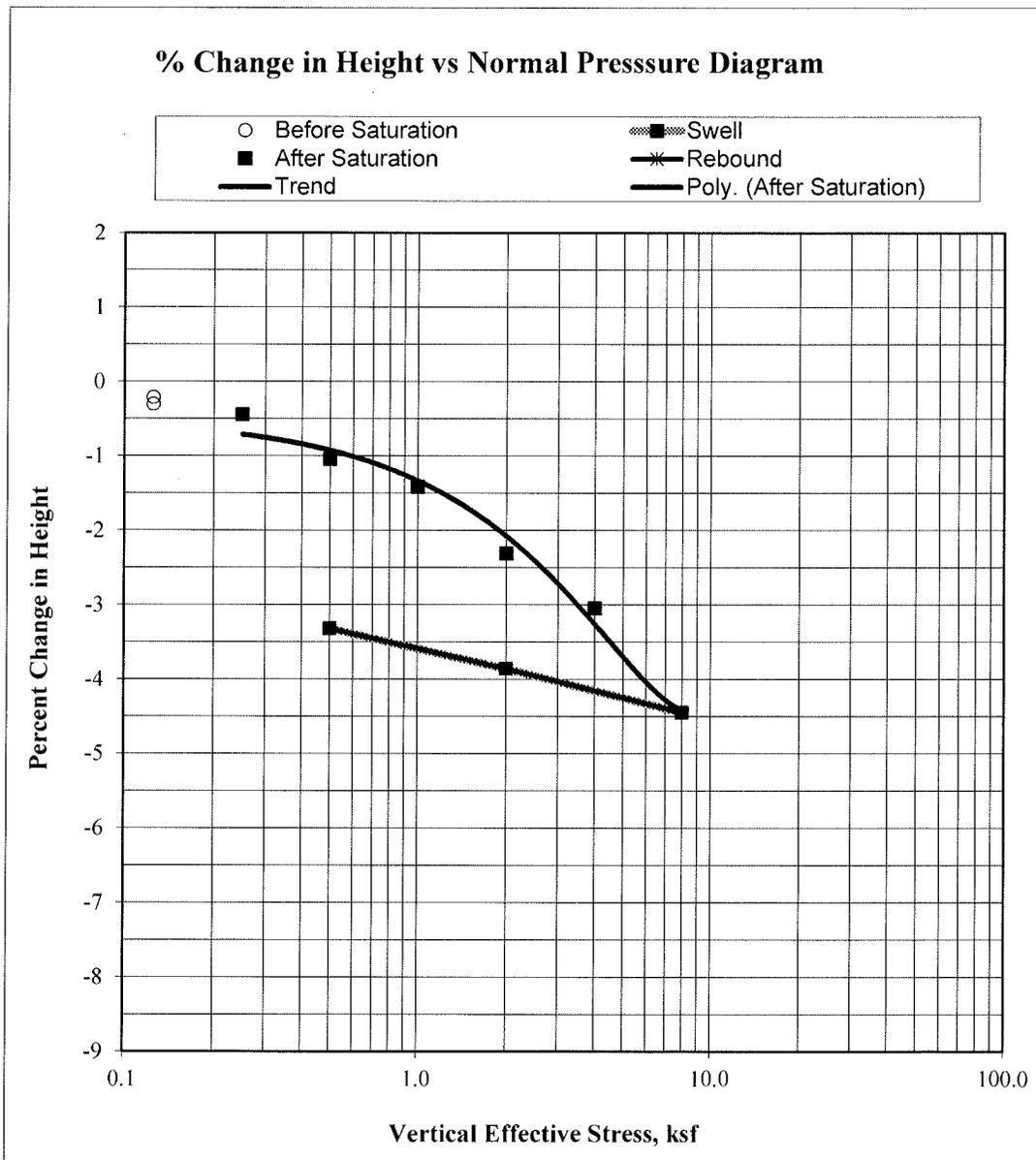


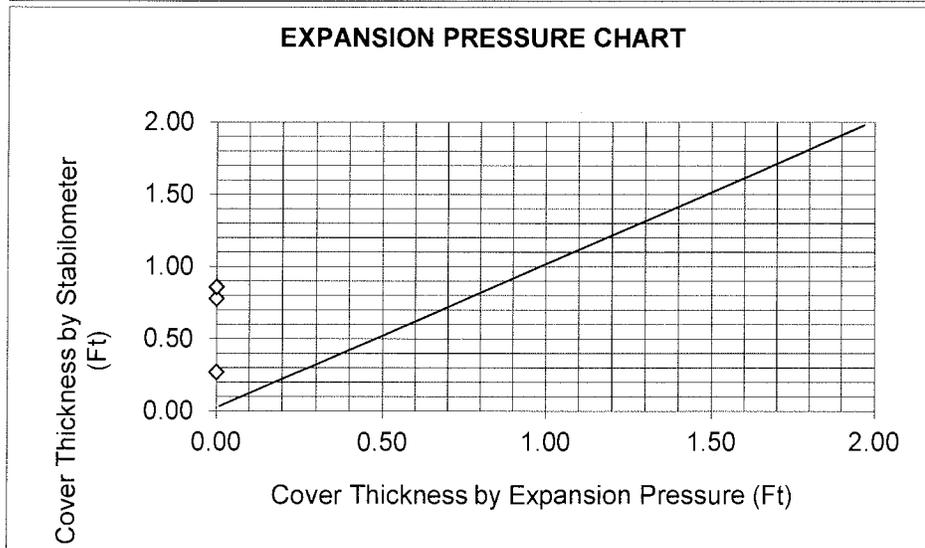
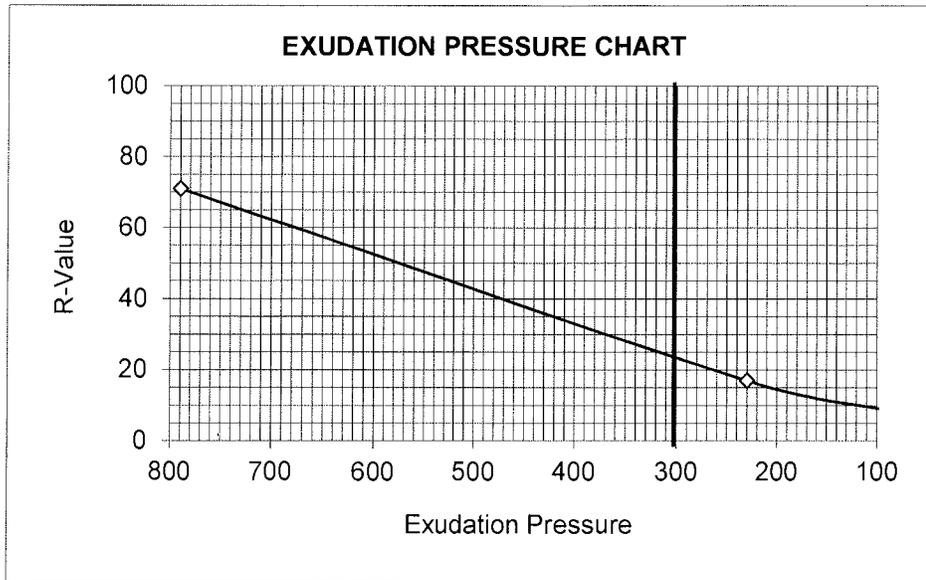
CONSOLIDATION TEST

ASTM D 2435-90

Doris & Patterson Middle School
 B 10 @ 5'
 SM
 Ring Sample

Initial Dry Density: 103.6 pcf
 Initial Moisture, %: 22.9%
 Specific Gravity: 2.67 (assumed)
 Initial Void Ratio: 0.608



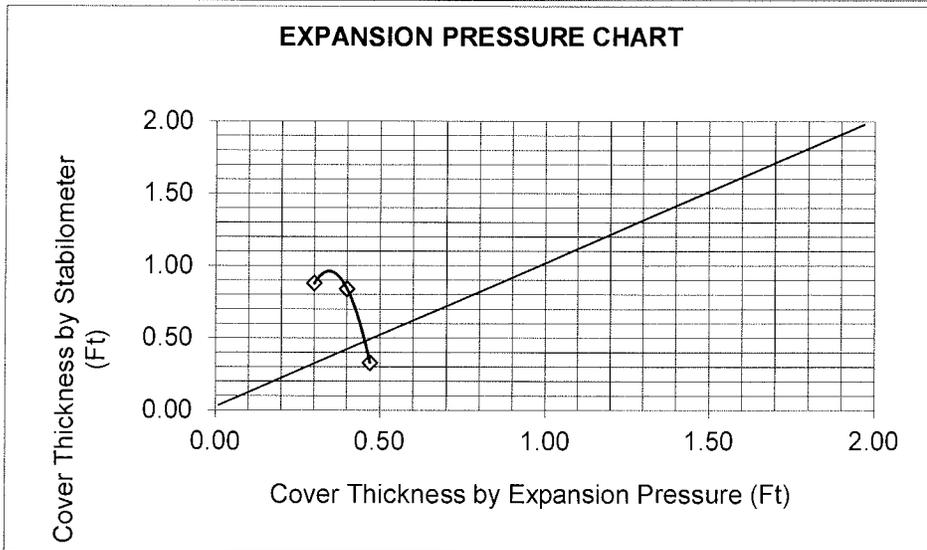
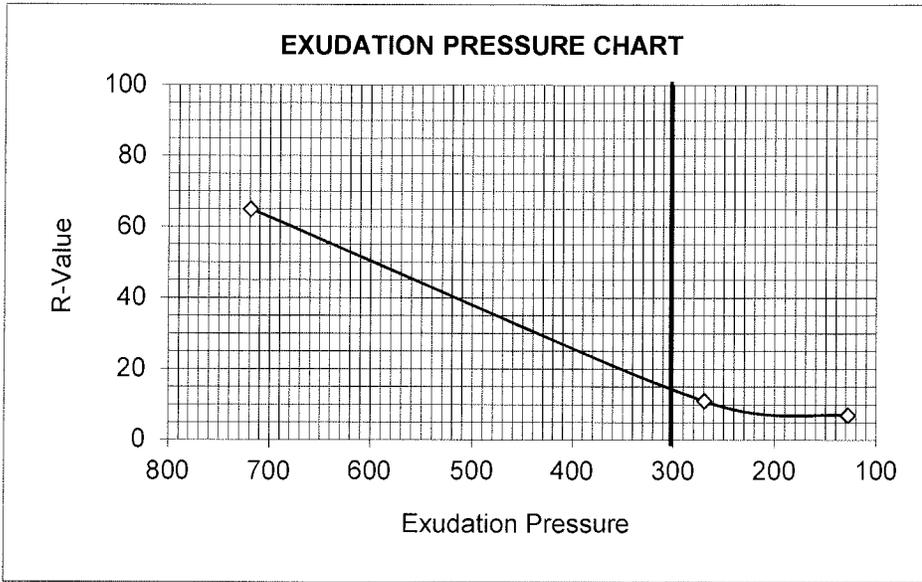


JOB NAME: Doris & Patterson Middle School
SAMPLE I. D.: Boring 1 @0-2'
SOIL DESCRIPTION: Silty Sand (SM)

SPECIMEN NUMBER	A	B	C
EXUDATION PRESSURE	790	230	95
RESISTANCE VALUE	71	17	9
EXPANSION DIAL(0.0001")	0	0	0
EXPANSION PRESSURE (PSF)	0.0	0.0	0.0
% MOISTURE AT TEST	10.5	12.5	14.2
DRY DENSITY AT TEST	122.1	120.8	118.4

R-VALUE @ 300 PSI EXUDATION	23
R-VALUE by Expansion Pressure*	100

**Based on a Traffic Index of 5.0 and a Gravel Factor of 1.70*



JOB NAME: Doris & Patterson Middle School
SAMPLE I. D.: Boring 11 @0-2.5'
SOIL DESCRIPTION: Clayey Sandy Silt (ML)

SPECIMEN NUMBER	A	B	C
EXUDATION PRESSURE	719	269	128
RESISTANCE VALUE	65	11	7
EXPANSION DIAL(0.0001")	14	12	9
EXPANSION PRESSURE (PSF)	60.6	52.0	39.0
% MOISTURE AT TEST	12.8	14.0	14.8
DRY DENSITY AT TEST	118.7	117.5	112.9

R-VALUE @ 300 PSI EXUDATION	15
R-VALUE by Expansion Pressure*	100

*Based on a Traffic Index of 5.0 and a Gravel Factor of 1.70



CERTIFICATE OF ANALYSIS

Client: Earth Systems Southern California
CAS LAB NO: 171672-01
Sample ID: B300-5'
Analyst: GP

Date Sampled: 09/01/17
Date Received: 09/05/17
Sample Matrix: Soil

WET CHEMISTRY ANALYSIS SUMMARY

COMPOUND	RESULTS	UNITS	DF	PQL	METHOD	ANALYZED
pH (Corrosivity)	7.9	S.U.	1	---	9045	09/08/17
Resistivity*	430	Ohms-cm	1	---	SM 120.1M	09/08/17
Chloride	59	mg/Kg	4	2.4	300.0M	09/08/17
Sulfate	3600	mg/Kg	5	3.0	300.0M	09/08/17

*Sample was extracted using a 1:3 ratio of soil and DI water.

DF: Dilution Factor
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
mg/Kg: Milligrams/Kilograms (ppm)



CERTIFICATE OF ANALYSIS

Client: Earth Systems Southern California Date Sampled: 09/01/17
CAS LAB NO: 171672-02 Date Received: 09/05/17
Sample ID: B800-5' Sample Matrix: Soil
Analyst: GP

WET CHEMISTRY ANALYSIS SUMMARY

COMPOUND	RESULTS	UNITS	DF	PQL	METHOD	ANALYZED
pH (Corrosivity)	7.8	S.U.	1	---	9045	09/08/17
Resistivity*	390	Ohms-cm	1	---	SM 120.1M	09/08/17
Chloride	35	mg/Kg	4	2.4	300.0M	09/08/17
Sulfate	4500	mg/Kg	10	6.0	300.0M	09/09/17

*Sample was extracted using a 1:3 ratio of soil and DI water.

DF: Dilution Factor
PQL: Practical Quantitation Limit
BQL: Below Quantitation Limit
mg/Kg: Milligrams/Kilograms (ppm)

TABLE 18-I-D
MINIMUM FOUNDATION REQUIREMENTS

(Numbers within parenthesis () are footnotes.
Refer to the following pages footnotes (1) through (8)

WEIGHTED EXPANSION INDEX	FOUNDATIONS FOR SLAB AND RAISED FLOOR SYSTEM (4) (5)						CONCRETE SLABS		PREMOISTENING OF SOILS UNDER FOOTINGS, PIERS AND SLABS (1)	RESTRICTIONS ON PIERS UNDER RAISED FLOORS A design by a registered structural engineer may be accepted when approved by the Building Official		
	NUMBER OF FLOORS	STEM THICKNESS		FOOTING WIDTH		FOOTING THICKNESS		3 1/2" MINIMUM THICKNESS				
		ALL PERIMETER FOOTINGS (5)	INTERIOR FOOTINGS FOR SLAB AND RAISED FLOORS (5)		REINFORCEMENT FOR CONTINUOUS FOUNDATIONS (2)	REINFORCEMENT (3)	TOTAL THICKNESS OF SAND					
			DEPTH BELOW NATURAL SURFACE OF GROUND AND FINISH GRADE (3) (8)									
INCHES												
0-20 Very low. (nonexpansive)	1	8	12	8	12	12	12	1-#4 top and bottom	6x6-10/10 WWF	2"	Moistening of ground recommended prior to placing concrete.	Piers allowed for single floor loads only
	2	8	15	7	18	18	18	1-#4 top and bottom	6x6-10/10 WWF	4"		
	3	10	18	8	24	24	24					
21-50 Low	1	8	12	6	15	12	12	1-#4 top and bottom	6x6-10/10 WWF	4"	120% of optimum moisture required to a depth of 21" below lowest adjacent grade. Testing required.	Piers allowed for single floor loads only.
	2	8	15	7	18	18	18					
	3	10	18	8	24	24	24					
51-90 Medium	1	8	12	8	21	12	12	1-#4 top and bottom	6x6-10/10 WWF	4"	130% of optimum moisture required to a depth of 27" below lowest adjacent grade. Testing required.	Piers not allowed.
	2	8	15	8	21	18	18					
	3	10	18	8	24	24	24					
91-130 High	1	8	12	8	27	12	12	1-#5 top and bottom	6x6-10/10 or #3 @ 24" E. W.	4"	140% of optimum moisture required of a depth of 33" below lowest adjacent grade. Testing required.	Piers not allowed.
	2	8	15	8	27	18	18					
	3	10	18	8	24	24	24					

Special design by licensed engineer/architect

Above 130
Very High

APPENDIX C

2016 CBC & ASCE 7-10 Seismic Parameters

USGS Design Maps Reports

Spectral Response Values

Response Spectra Curves

Fault Parameters

2016 California Building Code (CBC) (ASCE 7-10) Seismic Design Parameters

		<u>CBC Reference</u>	<u>ASCE 7-10 Reference</u>
Seismic Design Category	E	Table 1613.5.6	Table 11.6-2
Site Class	E	Table 1613.5.2	Table 20.3-1
Latitude:	34.208 N		
Longitude:	-119.206 W		

Maximum Considered Earthquake (MCE) Ground Motion

Short Period Spectral Response	S_S	2.495 g	Figure 1613.5	Figure 22-3
1 second Spectral Response	S_1	0.917 g	Figure 1613.5	Figure 22.4
Site Coefficient	F_a	0.90	Table 1613.5.3(1)	Table 11.4-1
Site Coefficient	F_v	2.40	Table 1613.5.3(2)	Table 11-4.2
	S_{MS}	2.246 g	$= F_a * S_S$	
	S_{M1}	2.201 g	$= F_v * S_1$	

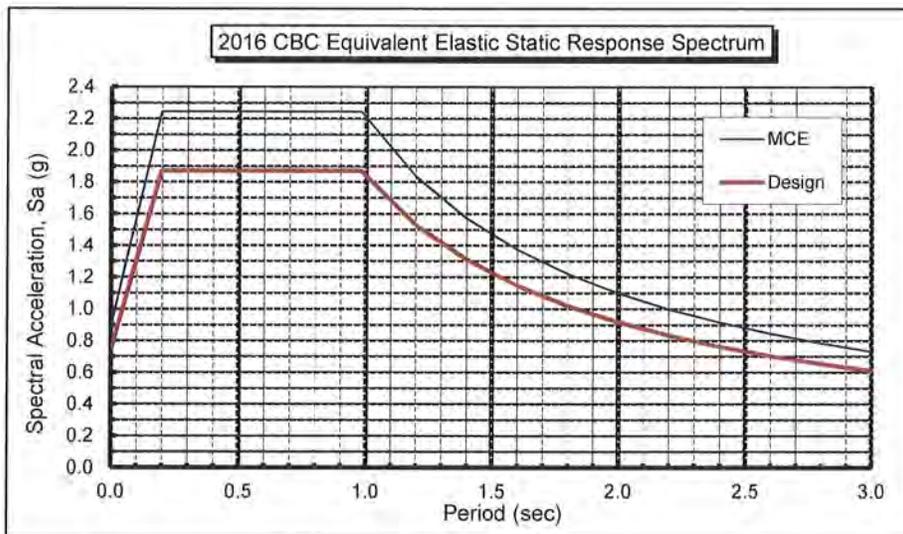
Design Earthquake Ground Motion

Short Period Spectral Response	S_{DS}	1.497 g	$= 2/3 * S_{MS}$
1 second Spectral Response	S_{D1}	1.467 g	$= 2/3 * S_{M1}$
	T_0	0.20 sec	$= 0.2 * S_{D1} / S_{DS}$
	T_s	0.98 sec	$= S_{D1} / S_{DS}$

Seismic Importance Factor	I	1.25	Table 1604.5
	F_{PGA}	0.90	

Table 11.5-1 Design

Period T (sec)	Sa (g)
0.00	0.749
0.05	1.035
0.20	1.871
0.98	1.871
1.20	1.528
1.40	1.310
1.60	1.146
1.80	1.019
2.00	0.917
2.20	0.834
2.40	0.764
2.60	0.705
2.80	0.655
3.00	0.611
3.20	0.573
3.40	0.539



USGS Design Maps Summary Report

User-Specified Input

Report Title Doris and Patterson Middle School
Tue August 29, 2017 23:53:22 UTC

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 34.2075°N, 119.2055°W

Site Soil Classification Site Class E – “Soft Clay Soil”

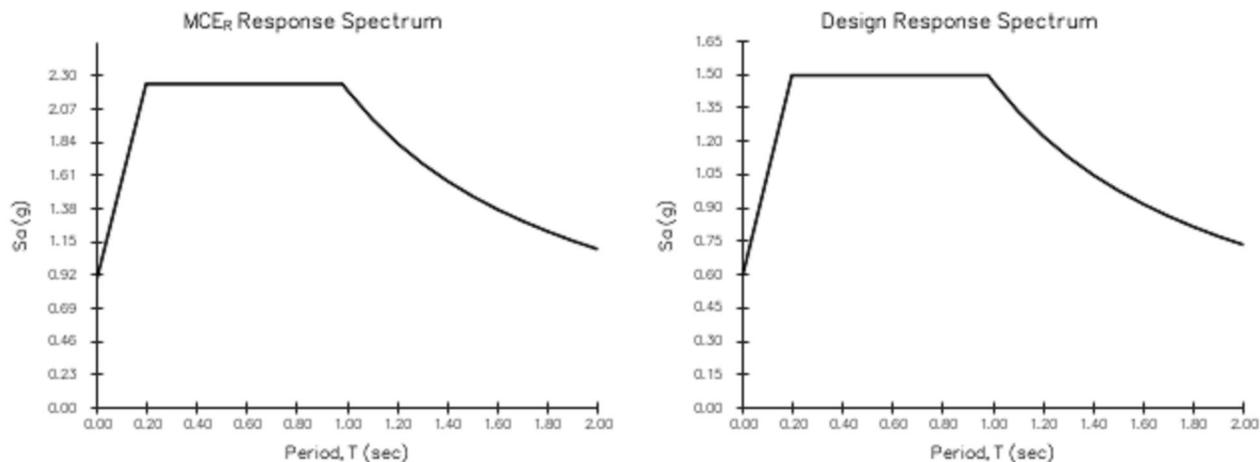
Risk Category I/II/III



USGS-Provided Output

$S_S = 2.495 \text{ g}$	$S_{MS} = 2.245 \text{ g}$	$S_{DS} = 1.497 \text{ g}$
$S_1 = 0.917 \text{ g}$	$S_{M1} = 2.201 \text{ g}$	$S_{D1} = 1.467 \text{ g}$

For information on how the S_S and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



For PGA_M , T_L , C_{RS} , and C_{R1} values, please [view the detailed report](#).

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.


Design Maps Detailed Report

ASCE 7-10 Standard (34.2075°N, 119.2055°W)

Site Class E – “Soft Clay Soil”, Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_S) and 1.3 (to obtain S_1). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From [Figure 22-1](#) ^[1]

$S_S = 2.495 \text{ g}$

From [Figure 22-2](#) ^[2]

$S_1 = 0.917 \text{ g}$

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class E, based on the site soil properties in accordance with Chapter 20.

Table 20.3-1 Site Classification

Site Class	\bar{v}_s	\bar{N} or \bar{N}_{ch}	\bar{s}_u
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
Any profile with more than 10 ft of soil having the characteristics:			
<ul style="list-style-type: none"> • Plasticity index $PI > 20$, • Moisture content $w \geq 40\%$, and • Undrained shear strength $\bar{s}_u < 500 \text{ psf}$ 			
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 11.4.3 — Site Coefficients and Risk-Targeted Maximum Considered Earthquake (MCE_R) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient F_a

Site Class	Mapped MCE _R Spectral Response Acceleration Parameter at Short Period				
	S _s ≤ 0.25	S _s = 0.50	S _s = 0.75	S _s = 1.00	S _s ≥ 1.25
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_s

For Site Class = E and S_s = 2.495 g, F_a = 0.900

Table 11.4-2: Site Coefficient F_v

Site Class	Mapped MCE _R Spectral Response Acceleration Parameter at 1-s Period				
	S ₁ ≤ 0.10	S ₁ = 0.20	S ₁ = 0.30	S ₁ = 0.40	S ₁ ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S₁

For Site Class = E and S₁ = 0.917 g, F_v = 2.400

Equation (11.4-1):

$$S_{MS} = F_a S_S = 0.900 \times 2.495 = 2.245 \text{ g}$$

Equation (11.4-2):

$$S_{M1} = F_v S_1 = 2.400 \times 0.917 = 2.201 \text{ g}$$

Section 11.4.4 — Design Spectral Acceleration Parameters

Equation (11.4-3):

$$S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 2.245 = 1.497 \text{ g}$$

Equation (11.4-4):

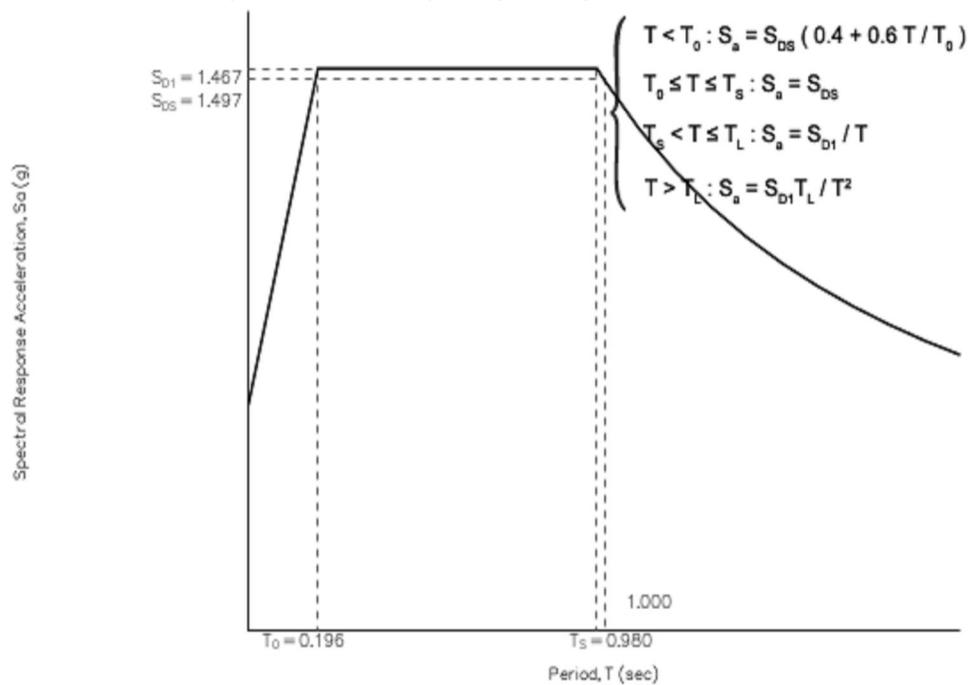
$$S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 2.201 = 1.467 \text{ g}$$

Section 11.4.5 — Design Response Spectrum

From [Figure 22-12](#) ^[3]

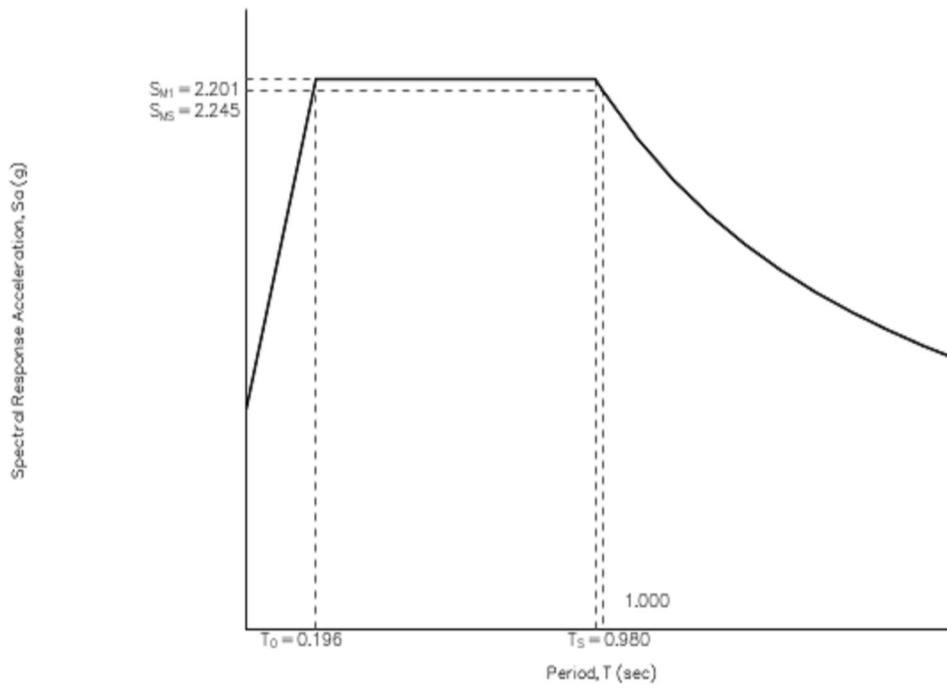
$$T_L = 8 \text{ seconds}$$

Figure 11.4-1: Design Response Spectrum



Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE_R) Response Spectrum

The MCE_R Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From [Figure 22-7](#) ^[4]

$$PGA = 0.970$$

Equation (11.8-1):

$$PGA_M = F_{PGA}PGA = 0.900 \times 0.970 = 0.873 \text{ g}$$

Table 11.8-1: Site Coefficient F_{PGA}

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of PGA

For Site Class = E and PGA = 0.970 g, $F_{PGA} = 0.900$

Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From [Figure 22-17](#) ^[5]

$$C_{RS} = 0.918$$

From [Figure 22-18](#) ^[6]

$$C_{R1} = 0.913$$

Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \leq S_{DS} < 0.33g$	B	B	C
$0.33g \leq S_{DS} < 0.50g$	C	C	D
$0.50g \leq S_{DS}$	D	D	D

For Risk Category = I and $S_{DS} = 1.497 g$, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \leq S_{D1} < 0.133g$	B	B	C
$0.133g \leq S_{D1} < 0.20g$	C	C	D
$0.20g \leq S_{D1}$	D	D	D

For Risk Category = I and $S_{D1} = 1.467 g$, Seismic Design Category = D

Note: When S_1 is greater than or equal to $0.75g$, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category \equiv "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = E

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

1. Figure 22-1: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
2. Figure 22-2: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf
3. Figure 22-12: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
4. Figure 22-7: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf
5. Figure 22-17: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
6. Figure 22-18: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf

Table 3 - Spectral Response Values
Probabilistic and Deterministic Response Spectra for MCE compared to Code Spectra
for 5% Viscous Damping Ratio

Natural Period T (seconds)	GeoMean Probab. 2% in 50 yr MCE Spectrum	Rotated Probab. 2% in 50 yr MCEr Spectrum	Max 84th Percentile Determ. MCE Spectrum	Determ. Lower Limit MCE Spectrum	Determ. MCE Spectrum	Site Specific MCE Spectrum	2016 CBC MCE Spectrum	Site Specific Design Spectrum	2016 CBC Design Spectrum
	(1) 2475-yr	(2) 2475-yr	(3)	(4)	(5) max(3,4)	(6) min(2,5)	(7)	(8) 2/3*(6)*	(9) 2/3*(7)
0.00	0.719	0.726	0.649	0.540	0.649	0.649	0.898	0.479	0.599
0.05	0.908	0.917	0.726	0.730	0.730	0.730	1.242	0.662	0.828
0.10	1.097	1.108	0.951	0.920	0.951	0.951	1.586	0.846	1.057
0.15	1.283	1.295	1.152	1.110	1.152	1.152	1.929	1.029	1.286
0.20	1.468	1.482	1.195	1.299	1.299	1.299	2.246	1.198	1.497
0.30	1.579	1.593	1.289	1.350	1.350	1.350	2.246	1.198	1.497
0.40	1.578	1.664	1.339	1.350	1.350	1.350	2.246	1.198	1.497
0.50	1.577	1.734	1.458	1.350	1.458	1.458	2.246	1.198	1.497
0.75	1.427	1.631	1.647	1.350	1.647	1.631	2.246	1.198	1.497
1.00	1.276	1.514	1.647	1.350	1.647	1.514	2.201	1.174	1.467
1.50	1.053	1.249	1.602	0.960	1.602	1.249	1.467	0.833	0.978
2.00	0.829	0.984	1.470	0.720	1.470	0.984	1.100	0.656	0.734

Crs: 0.918
 Crl: 0.913

* > 80% of (9)

Probabilistic Spectrum from 2008 USGS Ground Motion Mapping Program adjusted for site conditions and maximum rotated component of ground motion using NGA, Column 2 has risk coefficients Cr applied.

Reference: ASCE 7-10, Chapters 21.2, 21.3, 21.4 and 11.4

Mapped MCE Acceleration Values				Site Coefficients		Site-Specific Design Acceleration Values	
PGA	0.970	g		F _{PGA}	0.90	PGA_M	0.873 g
S _s	2.495	g		F _a	0.90	S_{DS}	1.198 g
S ₁	0.917	g		F _v	2.40	S_{D1}	1.312 g

Spectral Amplification Factor for different viscous damping, D (%):

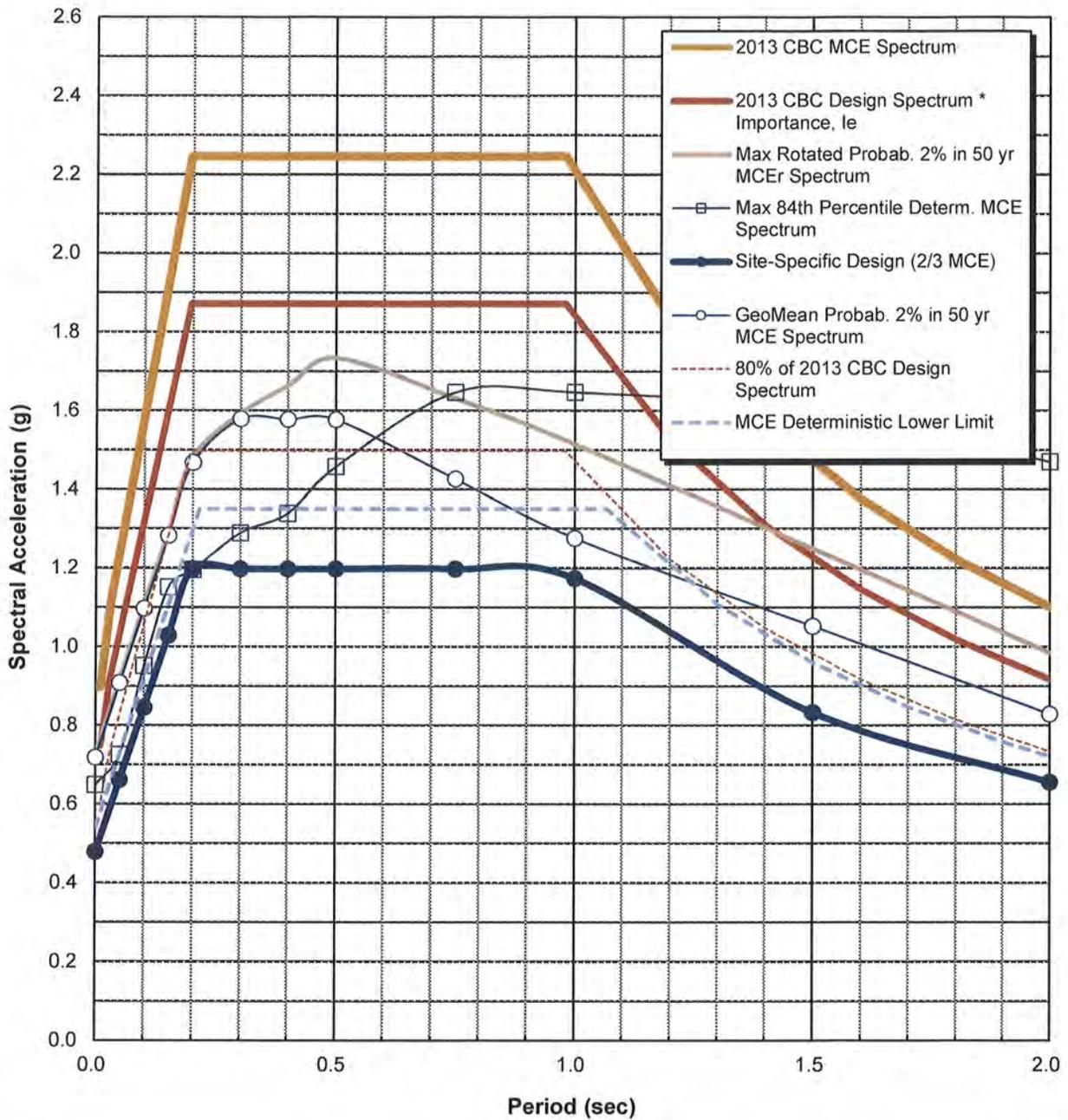
0.5%	2%	10%	20%
1.50	1.23	0.83	0.67

$$1 \text{ g} = 980.6 \text{ cm/sec}^2 = 32.2 \text{ ft/sec}^2$$

$$\text{PSV (ft/sec)} = 32.2(\text{Sa})T/(2\pi)$$

Key: Probab. = Probabilistic, Determ. = Deterministic, MCE = Maximum Considered Earthquake

RESPONSE SPECTRA



Based on USGS National Strong Ground Motion Interactive Deaggregation Website using 2008 Parameters

Site Class: E
 Latitude: 34.2075
 Longitude: -119.2055

Figure 3 - Response Spectra

Doris and Patterson Middle School
 File No.: VT-24867-10



Earth Systems
 Southern California

Table 1
Fault Parameters

Fault Section Name	Distance		Avg Dip Angle	Avg Dip Direction	Avg Rake	Trace Length	Fault Type	Mean Mag	Mean Return Interval	Slip Rate
	(miles)	(km)	(deg.)	(deg.)	(deg.)	(km)			(years)	(mm/yr)
Oak Ridge (Onshore)	2.8	4.5	65	159	90	49	B	7.2		4
Oak Ridge (Offshore)	4.9	7.9	32	180	90	38	B	6.9		3
Ventura-Pitas Point	5.9	9.4	64	353	60	44	B	6.9		1
Simi-Santa Rosa	6.1	9.7	60	346	30	39	B	6.8		1
Malibu Coast (Extension), alt 1	9.6	15.5	74	4	30	35	B'	6.5		
Malibu Coast (Extension), alt 2	9.6	15.5	74	4	30	35	B'	6.9		
Red Mountain	10.7	17.1	56	2	90	101	B	7.4		2
Channel Islands Thrust	13.0	20.9	20	354	90	59	B	7.3		1.5
Sisar	13.9	22.3	29	168	na	20	B'	7.0		
North Channel	14.7	23.7	26	10	90	51	B	6.7		1
Channel Islands Western Deep Ramp	15.0	24.1	21	204	90	62	B'	7.3		
Pitas Point (Lower)-Montalvo	15.7	25.3	16	359	90	30	B	7.3		2.5
Santa Cruz Island	15.8	25.5	90	188	30	69	B	7.1		1
Mission Ridge-Arroyo Parida-Santa Ana	16.1	25.8	70	176	90	69	B	6.8		0.4
Anacapa-Dume, alt 1	16.4	26.5	45	354	60	51	B	7.2		3
Anacapa-Dume, alt 2	16.4	26.5	41	352	60	65	B	7.2		3
San Cayetano	16.6	26.7	42	3	90	42	B	7.2		6
Malibu Coast, alt 1	19.1	30.8	75	3	30	38	B	6.6		0.3
Malibu Coast, alt 2	19.1	30.8	74	3	30	38	B	6.9		0.3
Shelf (Projection)	21.5	34.6	17	21	na	70	B'	7.8		
Santa Ynez (East)	21.7	34.9	70	172	0	68	B	7.2		2
Santa Cruz Catalina Ridge	22.6	36.3	90	38	na	137	B'	7.3		
Pitas Point (Upper)	22.7	36.5	42	15	90	35	B	6.8		1
Pine Mtn	25.9	41.7	45	5	na	62	B'	7.3		
Oak Ridge (Offshore), west extension	27.1	43.6	67	195	na	28	B'	6.1		
Santa Susana, alt 1	27.1	43.6	55	9	90	27	B	6.8		5
Santa Susana, alt 2	27.3	43.9	53	10	90	43	B'	6.8		
Santa Monica Bay	28.4	45.7	20	44	na	17	B'	7.0		
Northridge Hills	29.2	47.1	31	19	90	25	B'	7.0		
San Pedro Basin	29.7	47.9	88	51	na	69	B'	7.0		
Del Valle	30.0	48.3	73	195	90	9	B'	6.3		
Holser, alt 1	30.3	48.8	58	187	90	20	B	6.7		0.4
Holser, alt 2	30.3	48.8	58	182	90	17	B'	6.7		
Northridge	31.7	50.9	35	201	90	33	B	6.8		1.5
Santa Ynez (West)	31.7	51.1	70	182	0	63	B	6.9		2
Pitas Point (Lower, West)	32.6	52.5	13	3	90	35	B	7.2		2.5
Big Pine (Central)	32.9	53.0	76	167	na	23	B'	6.3		
Big Pine (West)	34.0	54.8	50	2	na	18	B'	6.5		
Compton	36.1	58.1	20	34	90	65	B'	7.5		
Big Pine (East)	36.4	58.6	73	338	na	23	B'	6.6		

Reference: USGS OFR 2007-1437 (CGS SP 203)

Based on Site Coordinates of 34.2075 Latitude, -119.2055 Longitude

Mean Magnitude for Type A Faults based on 0.1 weight for unsegmented section, 0.9 weight for segmented model (weighted by probability of each scenario with section listed as given on Table 3 of Appendix G in OFR 2007-1437). Mean magnitude is average of Ellsworths-B and Hanks & Bakun moment area relationship.

APPENDIX D

Liquefaction Analysis Printouts
Lateral Spreading Analysis Printouts

Liquefaction Analyses with Groundwater at a Depth of 6 Feet

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

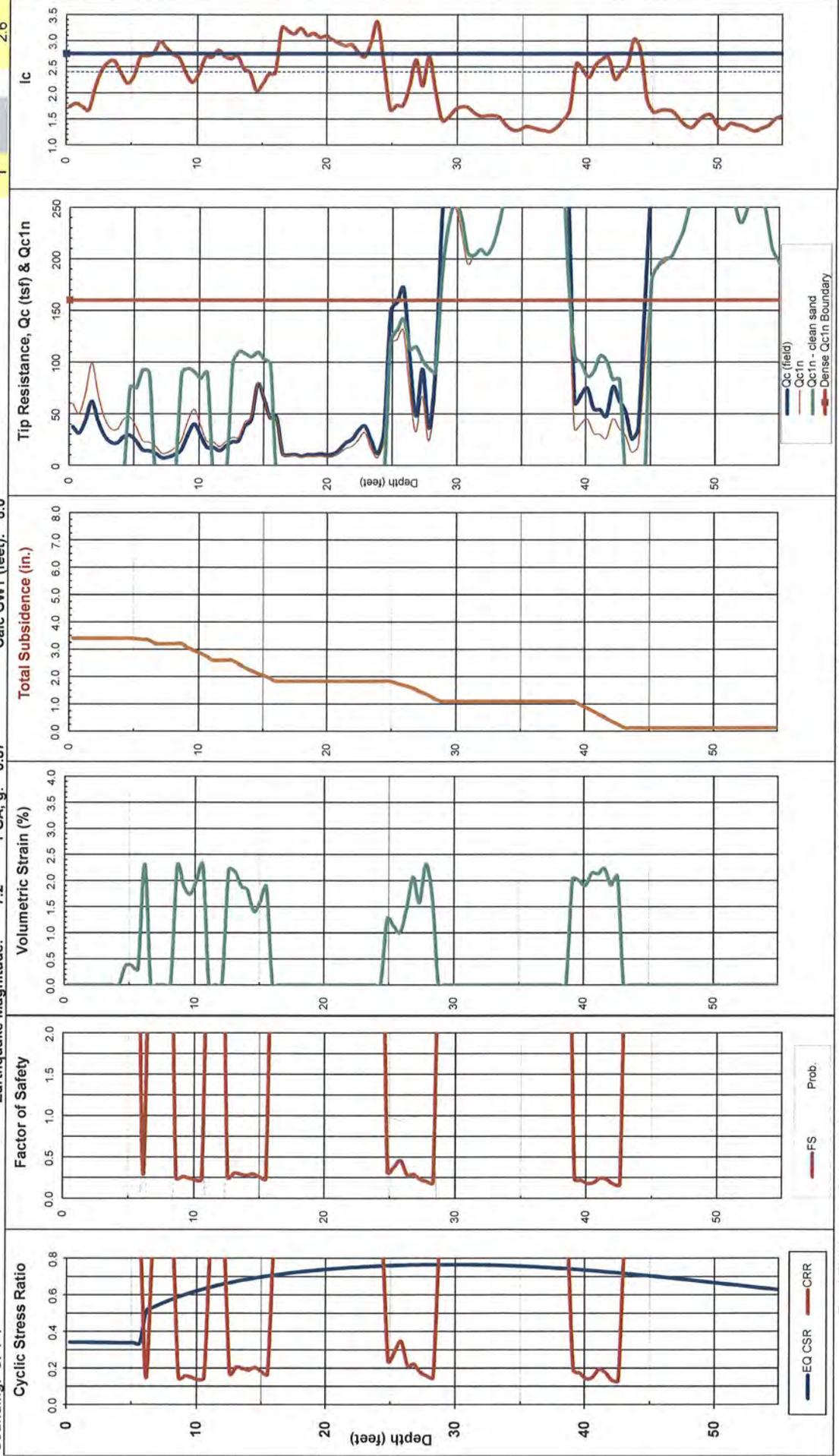
Doris and Patterson Project No: VT-24867-10

Method Used: 1 1998 NCEER (Robertson & Wride)
 Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1n/N1(60)$ ratio = 5
 PGA, g: 0.87 Calc GWT (feet): 6.0

Sounding: CPT-1

Plot 1

Limiting ic: 2.6



Total Thickness of Liquefiable Layers: 15.3 feet

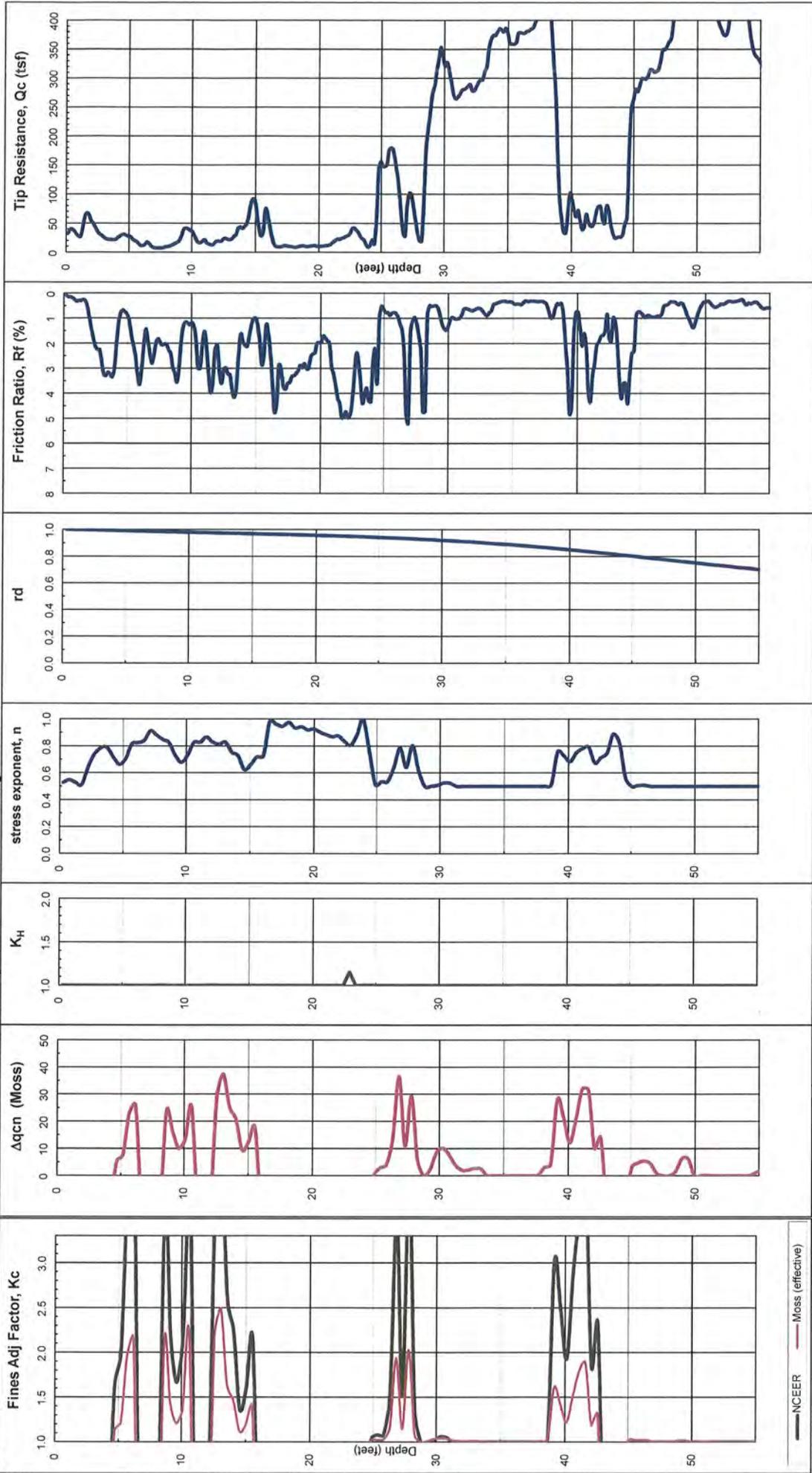
Estimated Total Ground Subsidence (Settlement): 3.4 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

3 avg increment = 0.15m Qc1n/N1(60): 5
 Ignore 1st/last increment into sand/silt soils: 0
 Sounding: CPT-1

Earthquake Magnitude: 7.2 PGA, g: 0.87



— NCEER — Moss (effective)

LIQUEFY-V.2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Developed 2006 by Shelton L. Stinger, PE, GE, PG - Earth Systems Southwest

Project: Doris & Patterson K-8 School
 Job No: VT-24857-10
 Date: 9/29/2017
 Boring: B-12
 Data Set: 1

Methods: Liquefaction Analysis using 1986 & 1998 NCEER workshop method (Youd & Idriss, editors)
 Journal of Geotechnical and Environmental Engineering (JGEE), October, 2001, Vol 127, No. 10, ASCE
 Settlement Analysis from Tokimatsu and Seed (1987), JGEE, Vol 113, No. 8, ASCE
 Modified by Pradeep, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:

Magnitude: 7.2
 Energy Correction to N60 (C_e): 1.33
 Automatic Hammer
 Drive Rod Corr. (C_{dr}): 1
 Default
 Rod Length above ground (feet): 3.0
 Borehole Dia. Corr. (C_b): 1.00
 Sampler Liner Correction for SPT?: 1
 Yes
 Cal Mod SPT Ratio: 0.83
 Threshold Accelerat., g: 0.18
 Minimum Calculated SF: 0.21
 Required SF: 1.30

SPT N VALUE CORRECTIONS:

PGA, g: 0.87
 MSF: 1.11
 GWT: 22.5 feet
 Calc GWT: 6.0 feet
 Remediate for: 5.0 feet

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Base	Cal	Liquef.	Total	Fines	Depth	Rod	Total Stress Eff Stress	at SPT	at SPT	rd	C _N	C _q	C _s	N ₍₆₀₎	Rel	Trigger	Eq _{ult}	Stand	K _r	Cor	Available	Induced	Safety	FC Adj	Post	Volumetric	Strain	Strain	Enc	Dry Sand					
Depth	Mod	SPT	Suscept.	Unit Wt.	Content of SPT	Length	po (tsf)	po (tsf)	p'o (tsf)					Dr (%)	ΔN ₍₆₀₎	N _{(60)CS}						CRR	CSR*	Factor	ΔN ₍₆₀₎	N _{(60)CS}	(%)	Strain	E ₁₅	Strain	Enc	Subsidence			
(feet)	N	N	(0 or 1)	(pcf)	(%)	(feet)																										(in.)			
4.0	13	50	1	122	45	3.0	0.183	0.183	0.183	0.89	1.70	0.75	1.00	85.0	100	100	95.0	1.00	1.400	0.509	1.400	0.509	1.400	0.509	Non-Liq.	10.0	95.0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	8	50	1	122	45	4.0	0.244	0.244	0.244	0.99	1.70	0.75	1.00	85.0	100	100	95.0	1.00	1.400	0.508	1.400	0.508	1.400	0.508	Non-Liq.	10.0	95.0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.0	8	5	1	122	45	5.0	0.305	0.305	0.305	0.99	1.70	0.75	1.00	86	35	6.7	15.3	1.00	1.400	0.506	1.400	0.506	1.400	0.506	Non-Liq.	6.7	15.3	0.35	0.04	0.04	0.04	0.04	0.04	0.04	0.04
12.0	4	4	1	122	63	10.0	0.610	0.610	0.610	0.98	1.32	0.76	1.10	59	29	6.2	12.0	1.00	1.300	0.629	1.300	0.629	1.300	0.629	0.21	4.5	10.4	2.56	1.84	1.84	1.84	1.84	1.84	1.84	
16.5	6	6	1	122	63	15.0	0.915	0.915	0.915	0.97	1.08	0.86	1.10	82	34	6.6	14.8	1.00	1.160	0.715	1.160	0.715	1.160	0.715	0.22	4.5	12.7	2.22	1.20	1.20	1.20	1.20	1.20	1.20	
23.5	6	6	1	125	79	17.5	1.069	1.069	1.069	0.96	1.00	0.90	1.10	79				1.00	Inf.	0.741	1.00	0.741	1.00	0.741	Non-Liq.	7.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25.0	6	20	1	125	37	23.5	1.444	1.444	1.444	0.95	0.87	0.97	1.27	26.4	64	10.0	38.4	1.00	1.400	0.779	1.400	0.779	1.400	0.779	1.80	10.0	38.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27.0	15	15	1	125	37	25.0	1.538	1.538	1.538	0.94	0.85	0.98	1.20	20.1	54	9.0	29.1	1.00	1.380	0.784	1.380	0.784	1.380	0.784	0.49	3.0	23.1	1.37	0.33	0.33	0.33	0.33	0.33	0.33	
29.0	20	20	1	125	37	27.5	1.694	1.694	1.694	0.93	0.83	1.00	1.27	28.0	63	10.0	38.0	1.01	1.400	0.781	1.400	0.781	1.400	0.781	1.79	10.0	38.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.0	27	27	1	125	37	30.0	1.850	1.850	1.850	0.92	0.81	1.00	1.30	37.9	74	10.0	47.9	0.98	1.400	0.804	1.400	0.804	1.400	0.804	1.74	10.0	47.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.5	40	40	1	125	37	35.0	2.163	2.163	2.163	0.89	0.77	1.00	1.30	53.6	87	10.0	63.6	0.93	1.400	0.839	1.400	0.839	1.400	0.839	1.67	10.0	63.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.0	46	46	1	125	5	37.5	2.319	2.319	2.319	0.87	0.76	1.00	1.30	60.3	93	0.0	60.3	0.91	1.400	0.850	1.400	0.850	1.400	0.850	1.65	0.0	60.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	19	19	1	125	49	42.5	2.632	2.632	2.632	0.83	0.73	1.00	1.22	22.4	57	9.5	31.9	0.90	1.400	0.828	1.400	0.828	1.400	0.828	1.69	9.5	31.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.5	37	37	1	125	35	47.5	2.944	2.944	2.944	0.78	0.70	1.00	1.30	44.8	80	10.0	54.8	0.84	1.400	0.848	1.400	0.848	1.400	0.848	1.65	10.0	54.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

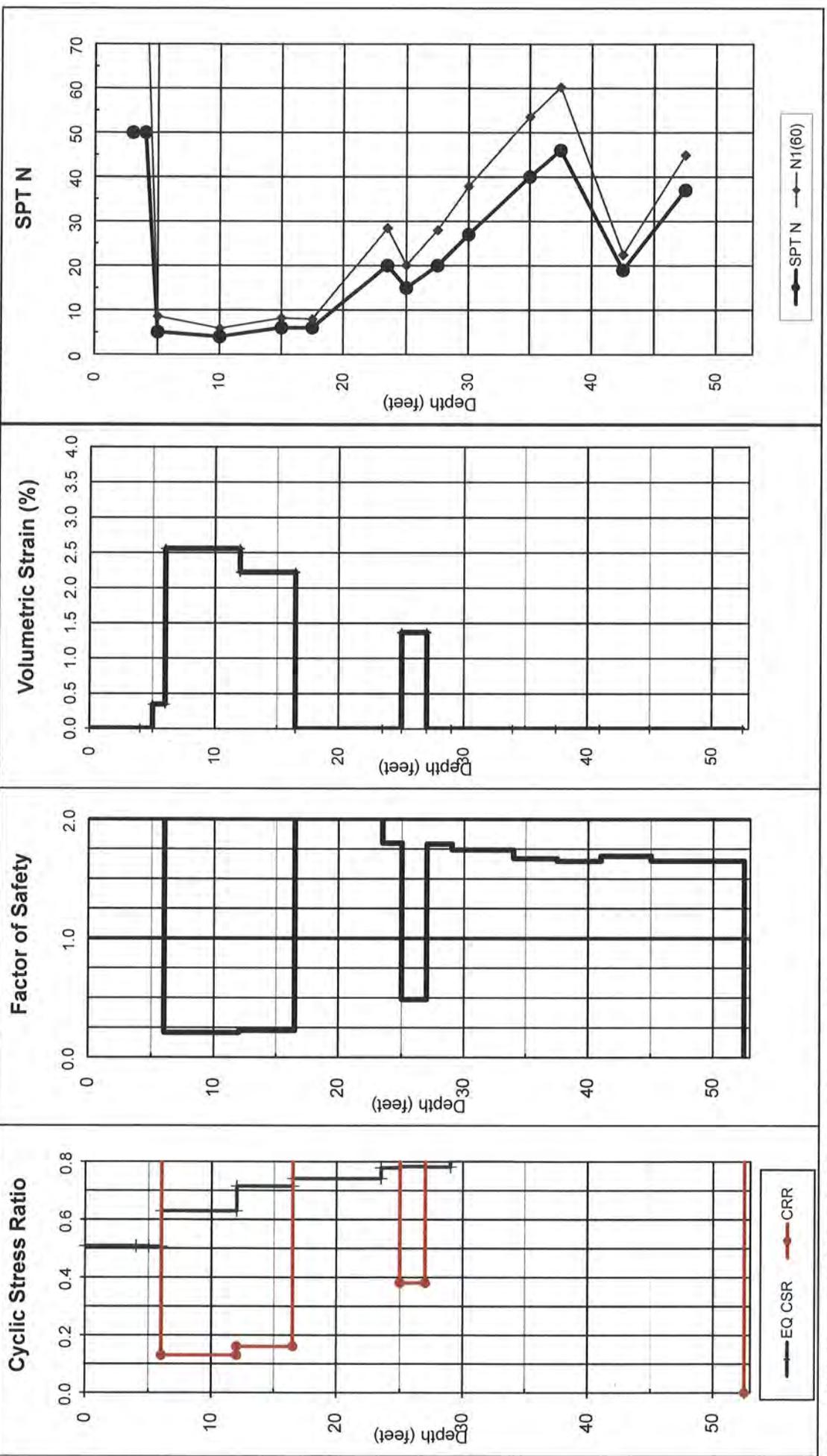
Nc = 12.5

Total (ft) Liquefied Thickness: 12.5

Total (ft) Induced Subsidence: 3.4

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-12 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Calc GWT (feet): 6** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**



Total Thickness of Liquefiable Layers: 12.5 feet

Estimated Total Ground Subsidence: 3.4 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

Method Used: 1 1998 NCEER (Robertson & Wride)

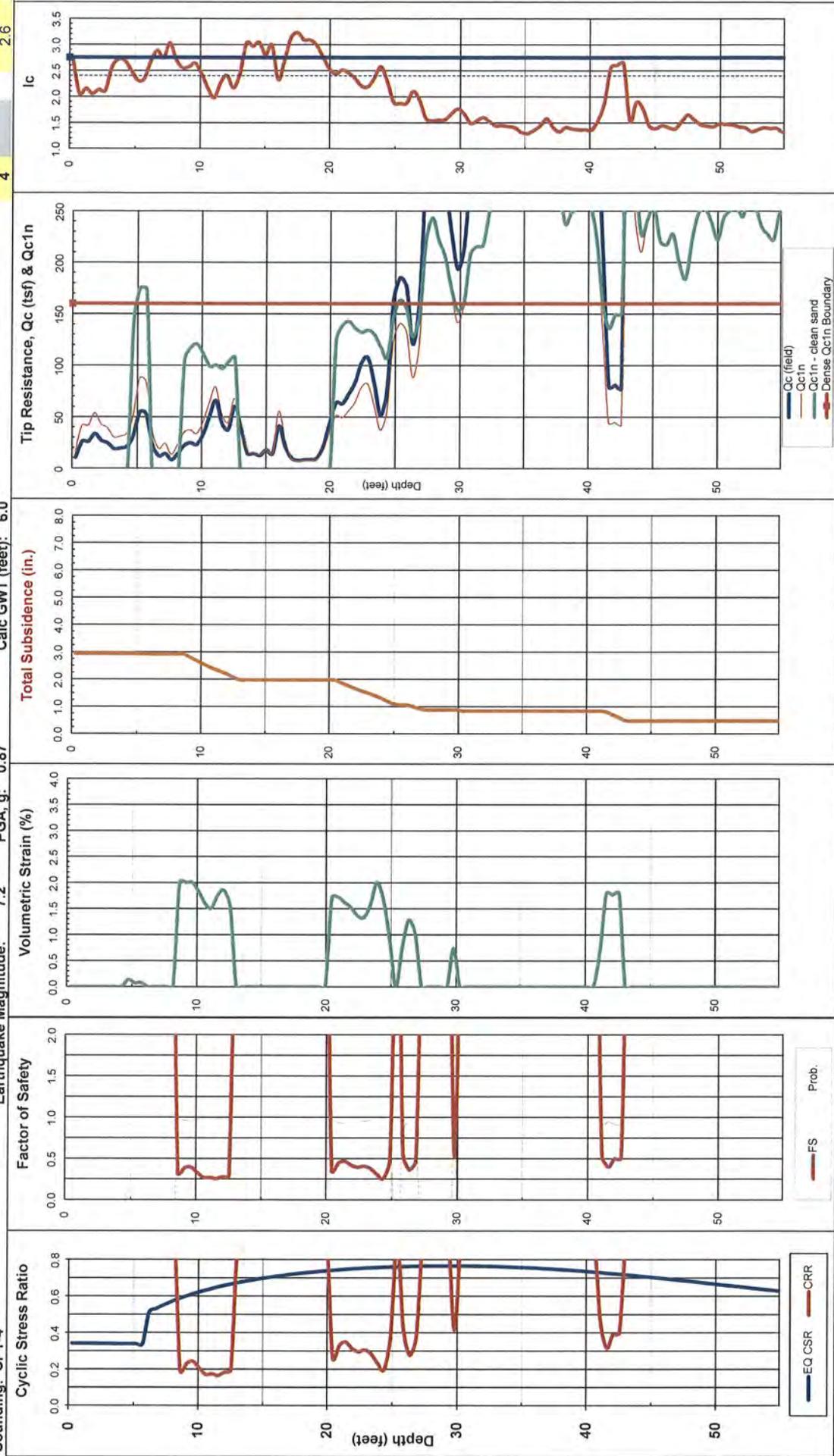
Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1n/N1(60)$ ratio =5

Earthquake Magnitude: 7.2 PGA, g: 0.87

Calc GWL (feet): 6.0

Plot 4 Limiting Ic: 2.6

Sounding: CPT-4



Total Thickness of Liquefiable Layers: 15.7 feet

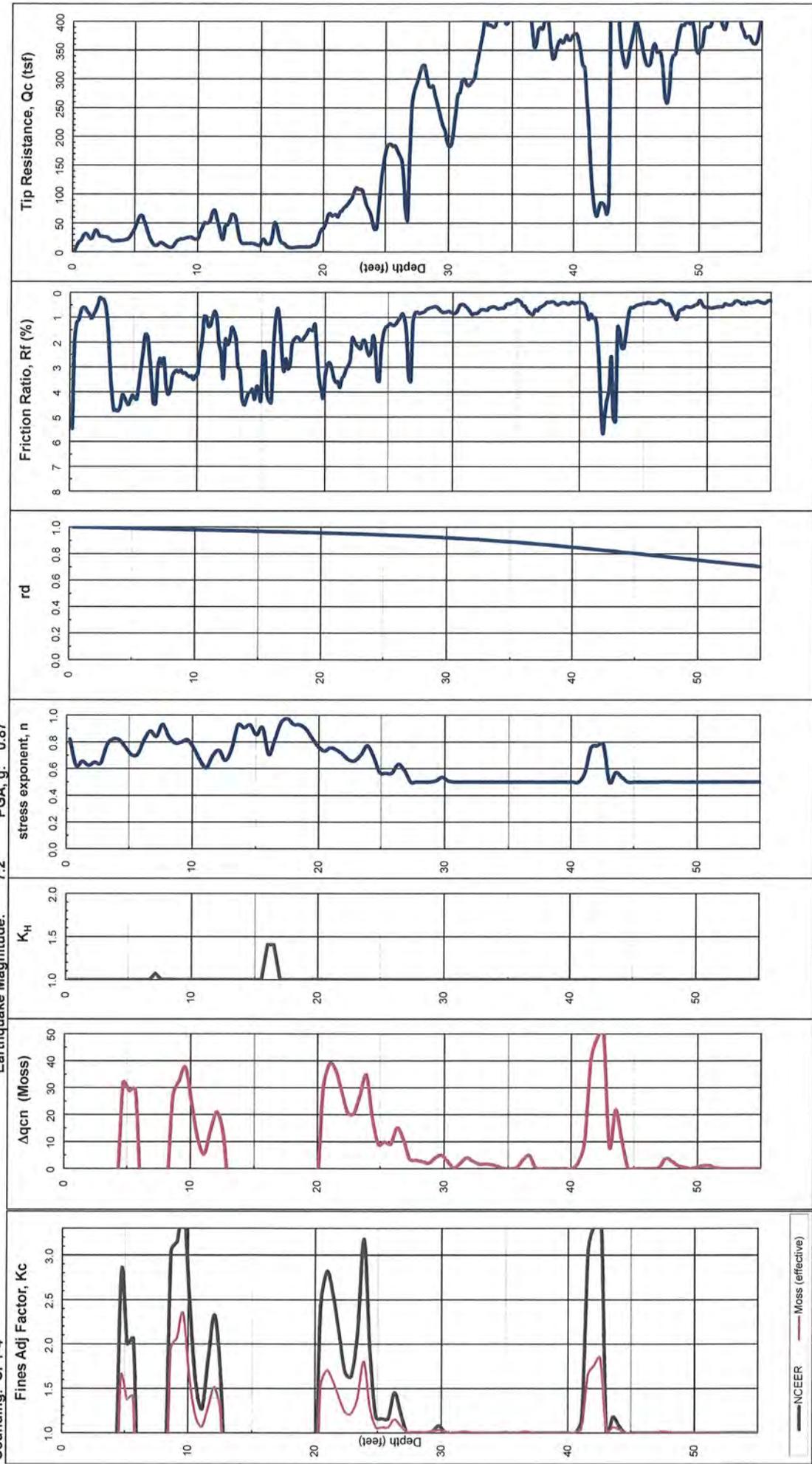
Estimated Total Ground Subsidence (Settlement): 2.9 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

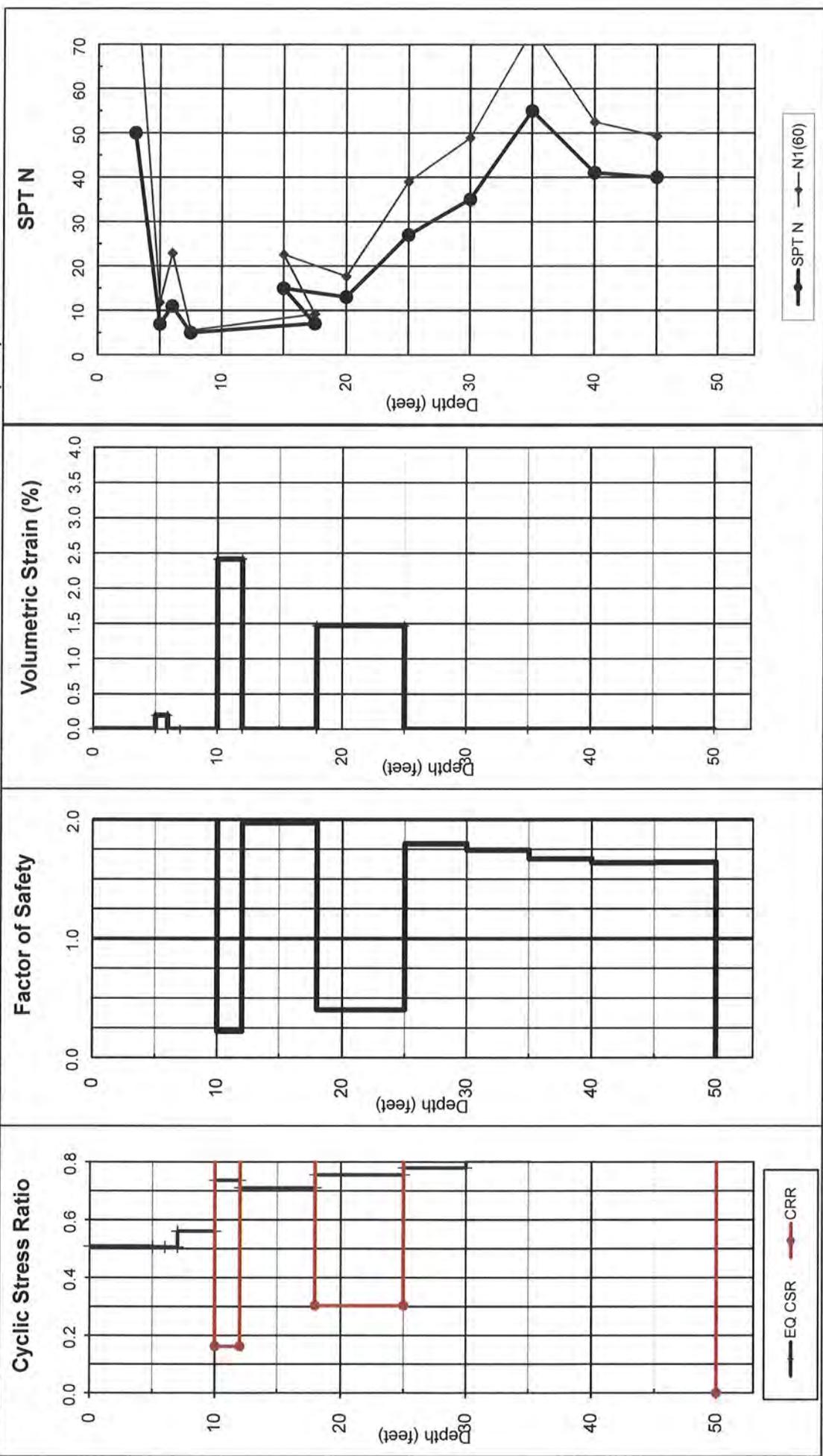
3 avg increment = 0.15m Qc1/n/N1(60): 5
 ignore 1s/last increment into sand/silt soils: 0
 Sounding: CPT-4

Earthquake Magnitude: 7.2 PGA, g: 0.87



EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-15 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Calc GWT (feet): 6** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**

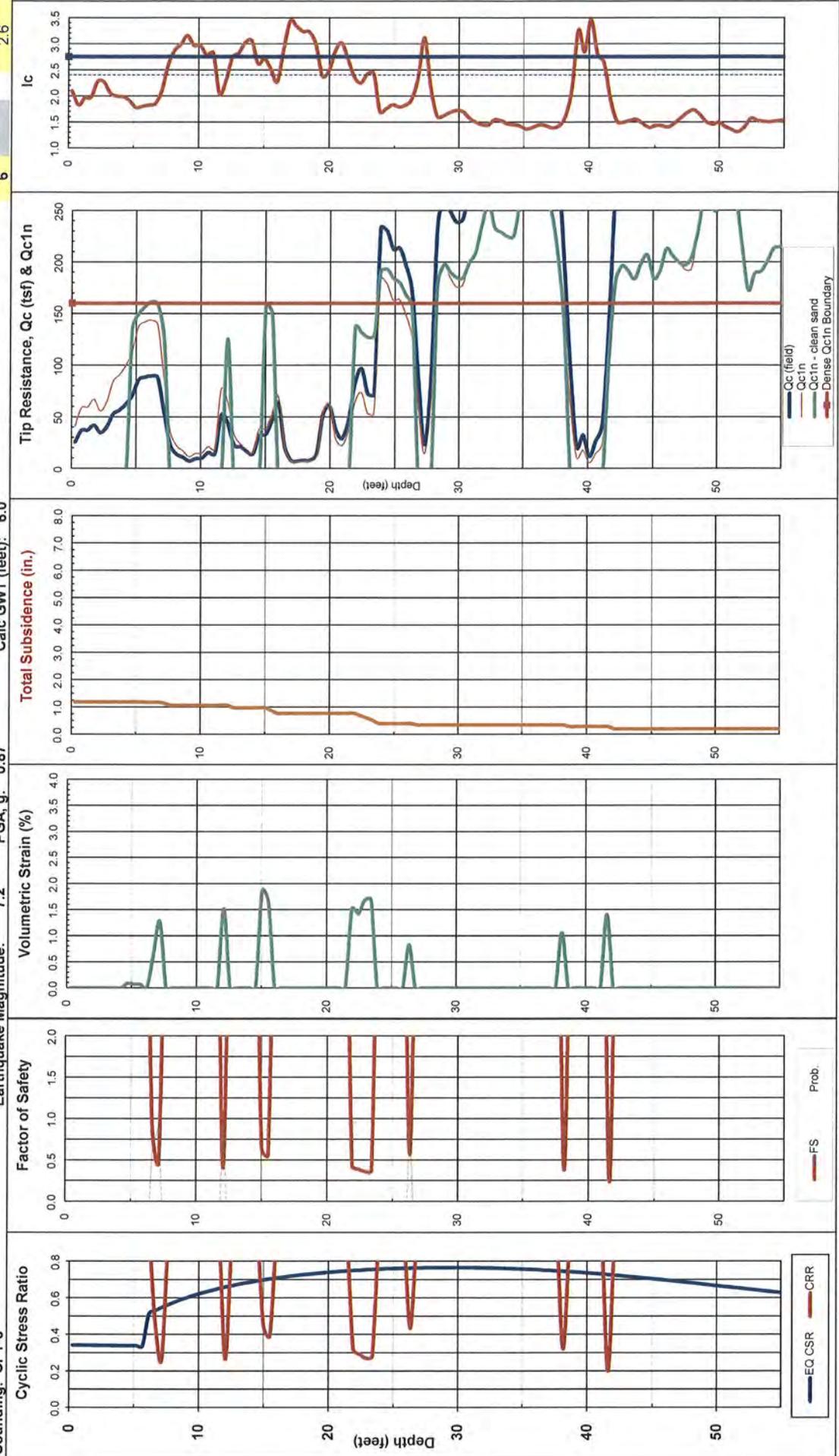


Total Thickness of Liquefiable Layers: 9.0 feet Estimated Total Ground Subsidence: 1.8 inches

Depth (feet)	Tip Qc (tsf)	Friction		Total Unit Wt. (pcf)	Total Stress ps (tsf)	Eff. Stress p'o (tsf)	F %	n	Max Cq	Moss qc1 MPa	Moss Δqc MPa	Moss qc1 _{mod} MPa	Moss eff Kc	Qc1n ic	Liquef. Suscept. (0 or 1)	Rel. Dens. Dr (%)	Kc	K _h	Clean Sand Qc1n	k _σ	CRR	CSR	M=7.5 Safety Factor	Induced Liquefac. Ratio	Qc1n N ₁₍₆₀₎	Equiv. FC Adj. ΔN ₁₍₆₀₎	Equiv. N ₁₍₆₀₎	Volumetric Strain (%)	
		Qc (tsf)	Fs (tsf)																										Ratio Rf %
24.11	233.23	2.17	0.93	22.33	130	1.545	1.503	0.945	0.94	19.77	0.58	20.35	1.03	183.91	1.70	1	100	1.04	1.00	190.5	1.00	infin.	0.756	Non-Liq.	5.7	32.4	5.7	38.1	0.00
24.61	7.50	230.07	2.53	22.03	130	1.577	1.519	0.943	1.11	19.57	0.81	20.38	1.04	179.25	1.76	1	100	1.08	1.00	192.9	1.00	infin.	0.757	Non-Liq.	5.6	32.2	5.3	38.6	0.00
25.10	7.65	212.33	2.68	20.33	130	1.609	1.536	0.941	1.27	18.07	1.03	19.10	1.06	163.21	1.83	1	97	1.13	1.00	194.1	1.00	infin.	0.759	Non-Liq.	5.4	30.1	6.7	36.8	0.00
25.59	7.80	213.30	2.37	20.43	130	1.641	1.552	0.940	1.12	16.53	0.83	18.82	1.05	163.72	1.79	1	97	1.10	1.00	179.7	1.00	infin.	0.760	Non-Liq.	5.5	29.8	6.2	35.9	0.00
26.08	7.95	196.60	2.22	18.83	130	1.673	1.569	0.938	1.14	16.49	0.85	17.35	1.05	149.47	1.82	1	94	1.12	1.00	167.7	1.00	infin.	0.761	Non-Liq.	5.4	27.5	6.0	33.5	0.00
26.57	8.10	170.57	2.39	16.33	130	1.705	1.586	0.936	1.42	15.57	1.09	12.77	1.09	127.17	1.94	1	87	1.23	1.00	156.0	1.00	0.433	0.762	0.57	5.2	24.4	5.5	29.9	0.82
27.07	8.25	87.37	2.23	8.37	130	1.737	1.602	0.934	2.60	7.36	2.79	10.14		61.62	3.35	0			1.00	0.99		0.763	Non-Liq.	4.4	14.0			0.00	
27.56	8.40	22.80	1.45	2.18	130	1.769	1.619	0.932	8.82	1.85	6.11	7.96		14.54	3.11	0			1.00	0.99		0.763	Non-Liq.	2.9	5.0			0.00	
28.05	8.55	86.80	1.10	8.31	130	1.801	1.636	0.930	1.29	6.075	7.03	8.06		62.15	2.15	0			1.00	0.99		0.764	Non-Liq.	4.8	13.0			0.00	
28.54	8.70	234.97	1.56	22.50	130	1.833	1.652	0.928	0.67	18.86	0.22	19.08	1.01	177.71	1.61	1	100	1.00	1.00	177.7	0.97	infin.	0.764	Non-Liq.	5.8	30.4	5.2	35.5	0.00

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10 Method Used: 1 1998 NCEER (Robertson & Wride) Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Q_{c1n}/N(60)$ ratio = 5
 Sounding: CPT-6 Earthquake Magnitude: 7.2 PGA, g: 0.87 Calc GWT (feet): 6.0 Plot 6 Limiting I_c : 2.6



Total Thickness of Liquefiable Layers: 6.9 feet

Estimated Total Ground Subsidence (Settlement): 1.2 inches

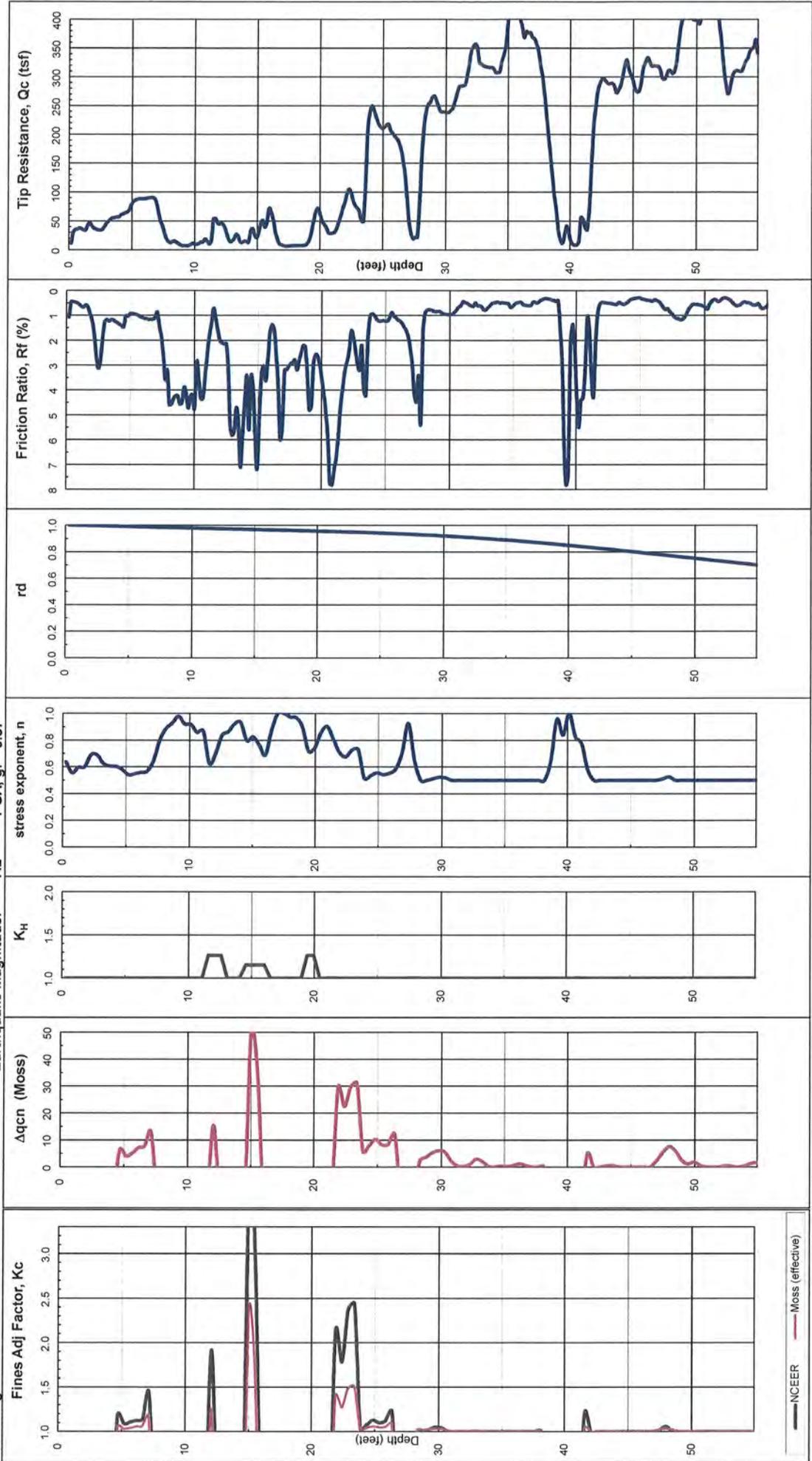
EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

3 avg increment = 0.15m Qc1m/N1(60): 5
 ignore 1st/last increment into sand/silt soils: 0

Sounding: CPT-6

Earthquake Magnitude: 7.2 PGA, g: 0.87



EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

Method Used: 1 1998 NCEER (Robertson & Wride)

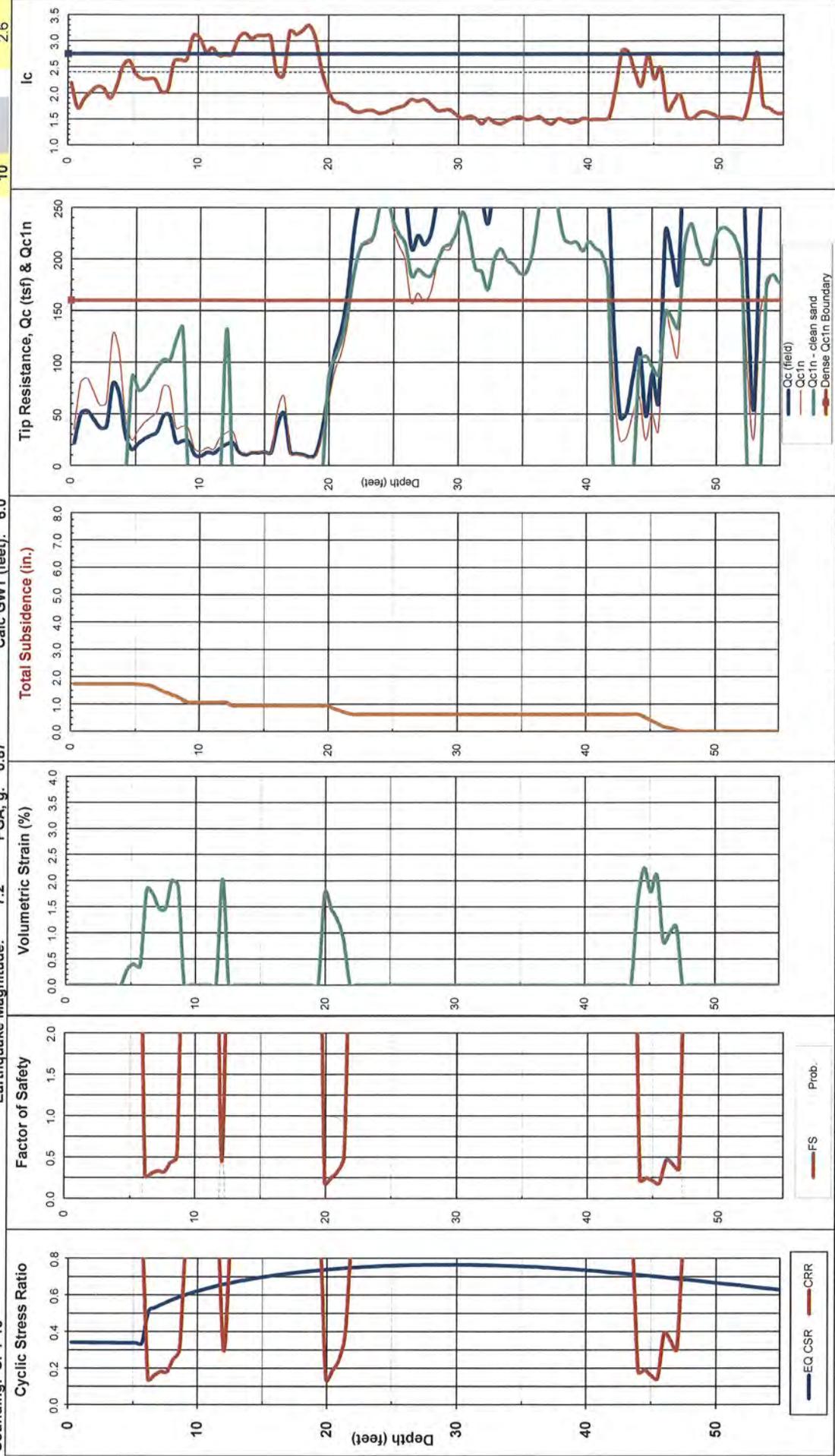
Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1n/N1(60)$ ratio = 5

Earthquake Magnitude: 7.2 PGA, g: 0.87

Calc GWT (feet): 6.0

Plot 10 Limiting ic : 2.6

Sounding: CPT-10



Total Thickness of Liquefiable Layers: 8.9 feet

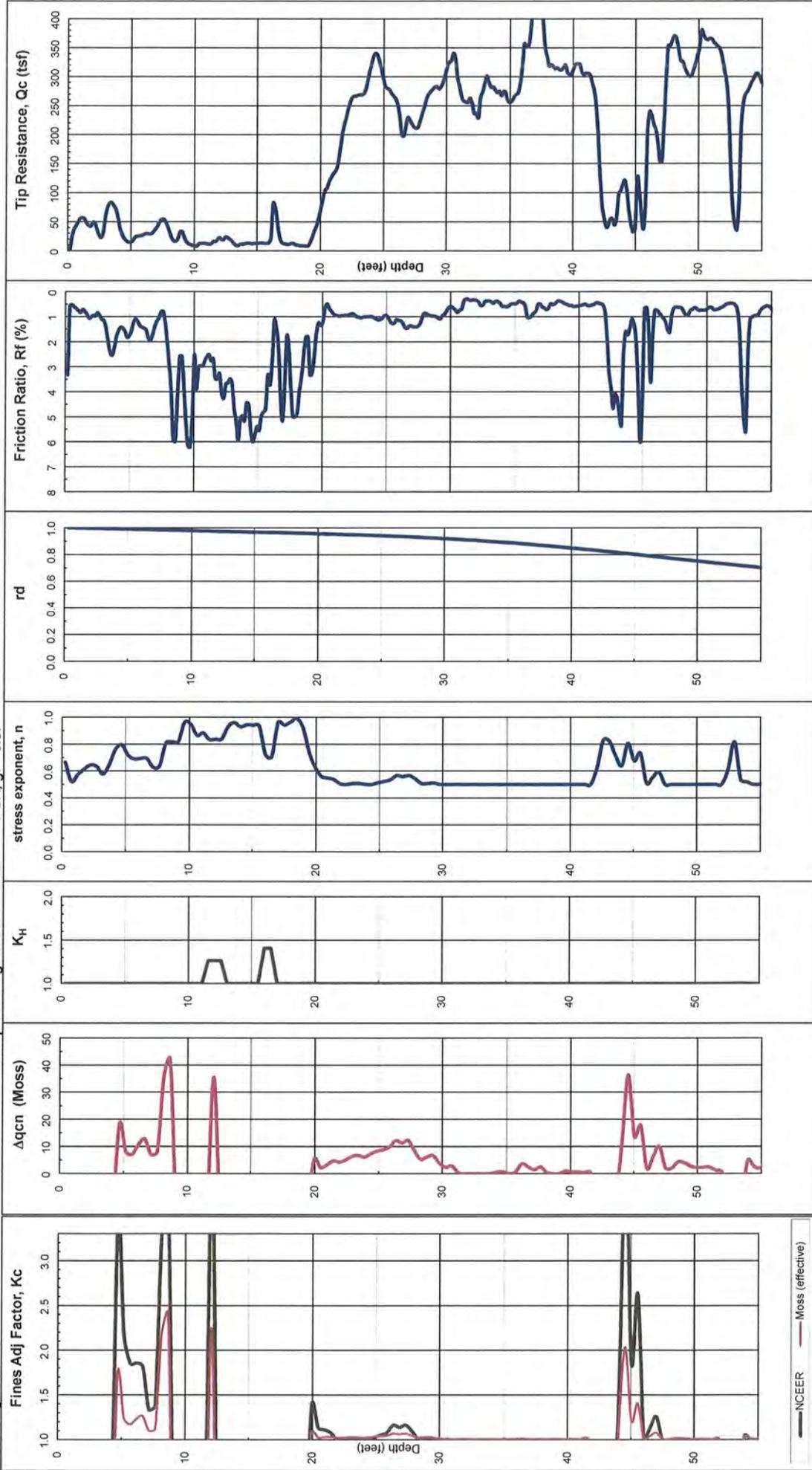
Estimated Total Ground Subsidence (Settlement): 1.7 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

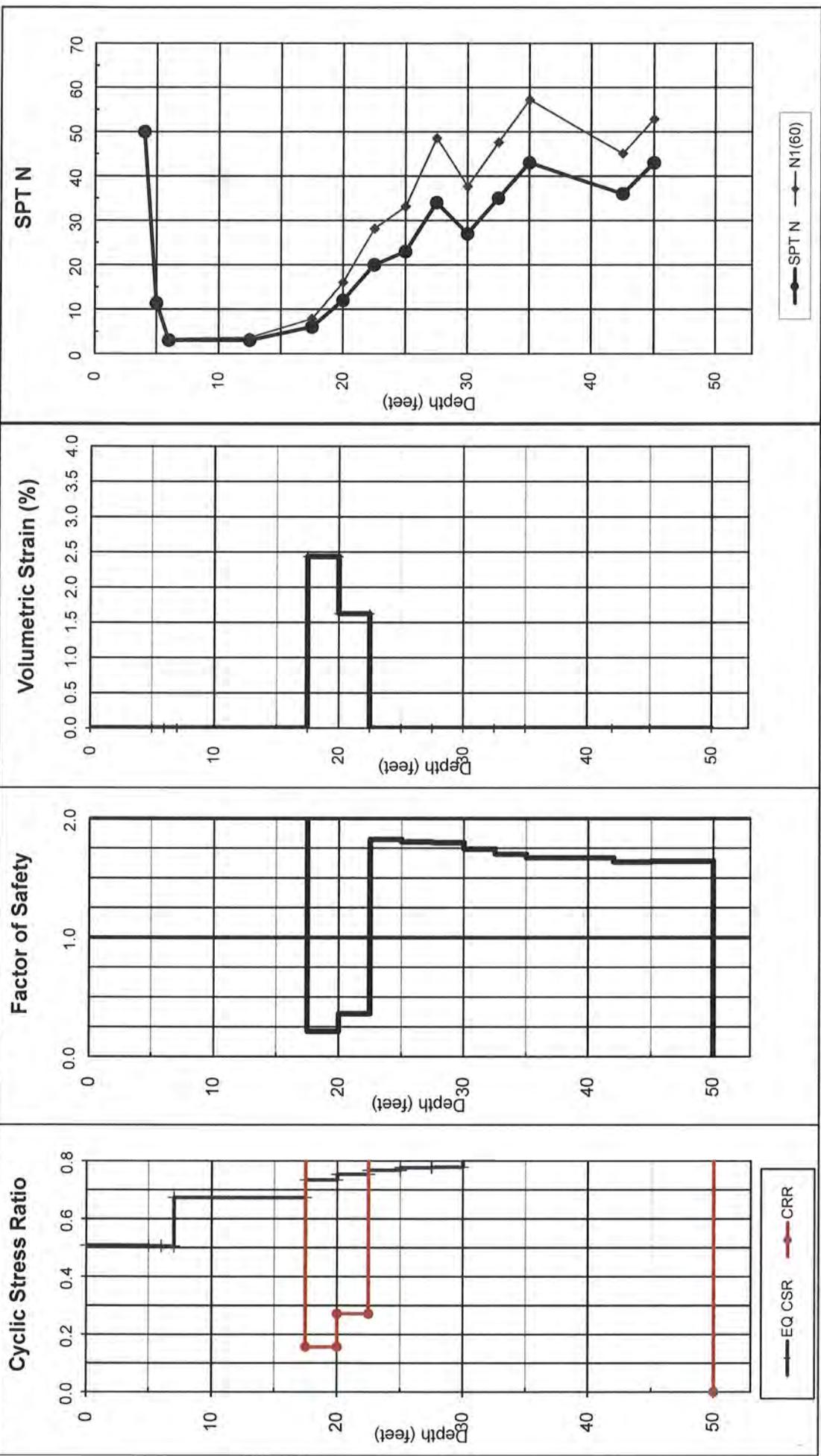
3 avg increment = 0.15m Qc1n/N1(60): 5
 ignore 1st/last increment into sand/silt soils: 0
 Sounding: CPT-10

Earthquake Magnitude: 7.2 PGA, g: 0.87



EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-13 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Calc GWT (feet): 6** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**



Total Thickness of Liquefiable Layers: 5.0 feet

Estimated Total Ground Subsidence: 1.2 inches

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE
 Developed 2006 by Shelton L. Stringer, PE, GE, PG - Earth Systems Southwest

Project: Doris & Patterson K-3 School
 Job No: VT-24857-10
 Date: 9/25/2017
 Boring: B-16
 Data Set: 1

Methods: Liquefaction Analysis using 1995 & 1998 NCEER workshop method (Youd & Idriss, editors)
 Journal of Geotechnical and Environmental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
 Settlement Analysis from Tokimatsu and Seed (1987), JGEE, Vol 113, No.8, ASCE
 Modified by Pradee, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:
 Magnitude: 7.2
 PGA: g: 0.87
 MSF: 1.11
 GWT: 22.5 feet
 Calc GWT: 6.0 feet
 Remediate to: 5.0 feet

SPT N VALUE CORRECTIONS:
 Energy Correction to N60 (C_e): 1.33
 Drive Rod Corr. (C_d): 1
 Rod Length above ground (feet): 3.0
 Borehole Dia. Corr. (C_b): 1.00
 Sampler Liner Correction for SPT?: 1
 Cal Mod SPT Ratio: 0.63

Threshold Acceler., g: 0.29
 Minimum Calculated SF: 0.34
 Required SF: 1.30

Total (ft) Liquefied Thickness: 11.5

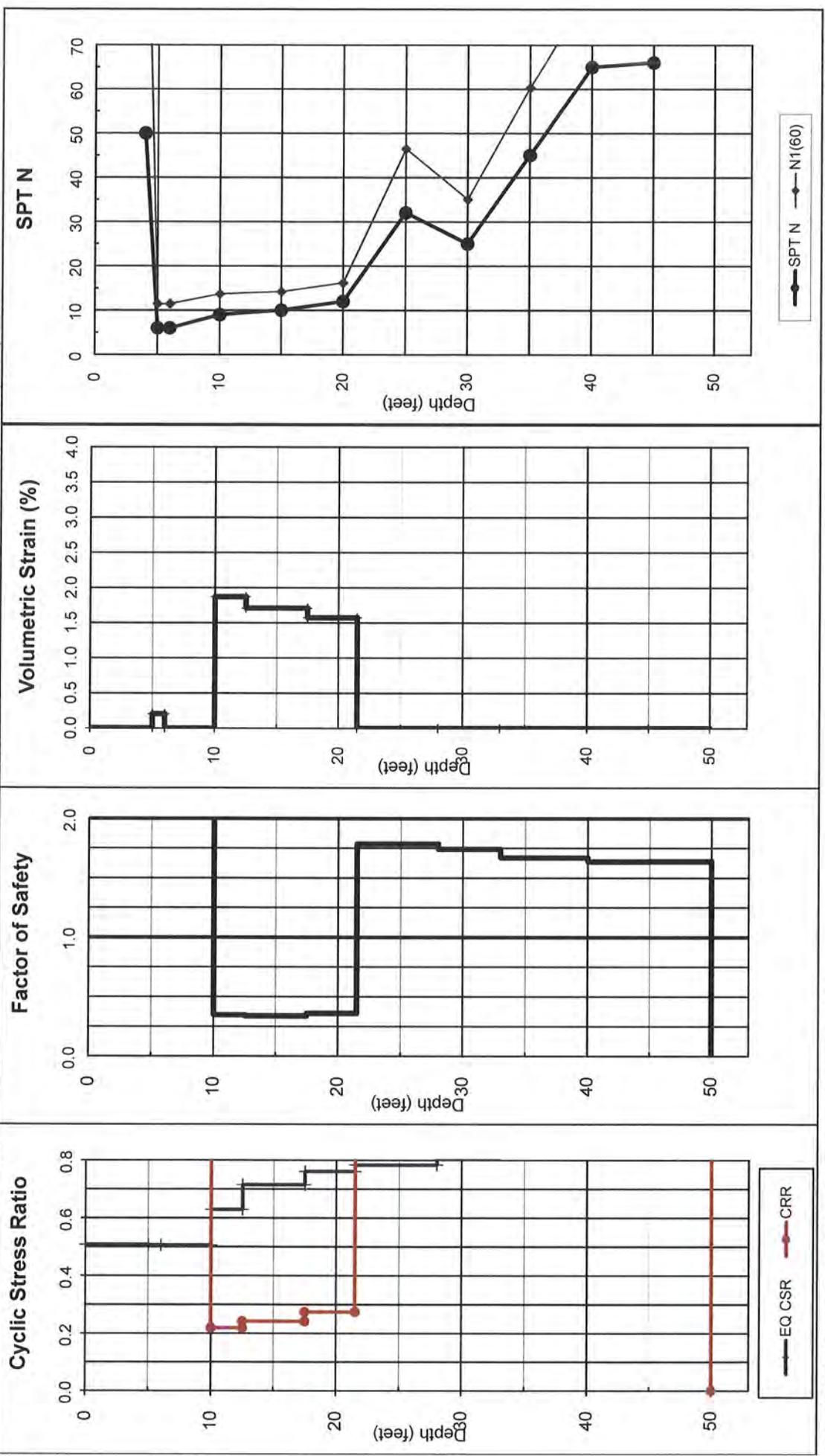
Total (in.) Induced Subsidence: 2.4

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Base Cal (feet)	Depth (feet)	Fines Content (%)	Total Unit Wt. (pcf)	Liquef. Suscept. (0 or 1)	Depth Mod SPT (N)	Calc SPT (N)	at SPT po (tsf)	at SPT p b (tsf)	rd	C _u	C _l	C _s	N ₍₆₀₎	Dens (pcf)	Dr (%)	Rel. Density	FC Adj.	Post FC Adj.	N _{(60)cs}	Volumetric Strain (%)	Induced Subsidence (in.)	p (tsf)	C _{flow} (tsf)	τ _{av} (tsf)	lav/Gmax	a	b	γ	Shear Strain E _s	Strain E _s	Strain E _s	Dry Sand Subsidence (in.)
5.0	4.0	63	122	1	50	50	0.244	0.244	0.99	1.70	0.75	1.30	110.5	100	100	100	10.0	10.0	120.5	0.00	0.00	0.163	893	0.092	0.0001	0.130	18.971	1.7E-04	2.0E-05	1.9E-05	0.00	
6.0	5.0	63	122	1	60	60	0.305	0.305	0.99	1.70	0.75	1.12	114.4	40	7.3	18.7	1.00	7.3	18.7	0.21	0.02	0.204	537	0.114	0.0002	0.132	16.594	1.0E-03	1.1E-03	1.0E-03	0.02	
10.0	9.0	63	122	1	60	60	0.366	0.366	0.99	1.70	0.75	1.14	114.4	40	7.3	18.7	1.00	7.3	18.7	0.00	0.00	0.245	588	0.137	0.0002	0.134	14.875	1.1E-03	1.1E-03	1.1E-03	0.00	
12.5	11.5	28	122	1	50	50	0.610	0.610	0.98	1.32	0.76	1.14	137.4	44	6.5	20.1	1.00	2.2	15.9	1.87	0.56	0.409	778	0.226	0.0003	0.140	10.948	1.1E-03	1.1E-03	1.1E-03	0.00	
17.5	16.5	20	122	1	50	50	0.915	0.915	0.97	1.08	0.86	1.15	142.4	45	7.8	22.1	1.00	2.2	18.2	1.71	1.03	0.613	982	0.335	0.0003	0.148	8.584	1.1E-03	1.1E-03	1.1E-03	0.00	
21.5	20.5	20	125	1	50	50	1.224	1.224	0.96	0.93	0.93	1.17	162.2	48	8.2	24.4	1.00	4.0	20.2	1.57	0.75	0.820	1,175	0.443	0.0004	0.156	7.210	1.1E-03	1.1E-03	1.1E-03	0.00	
28.0	27.0	32	125	1	32	32	1.536	1.536	1.458	0.94	0.85	1.30	465.5	81	0.0	46.5	1.00	0.0	46.5	0.00	0.00	1.029	1,630	0.547	0.0003	0.164	5.290	6.8E-04	6.8E-04	6.8E-04	0.00	
33.0	32.0	5	125	1	25	25	1.849	1.849	1.615	0.92	0.81	1.00	351.1	71	0.0	35.1	0.98	1.74	35.1	0.00	0.00	1.239	1,629	0.644	0.0004	0.172	5.629	8.7E-04	8.7E-04	8.7E-04	0.00	
40.0	39.0	5	125	1	25	25	2.161	2.161	1.771	0.89	0.77	1.00	603.3	93	0.0	60.3	0.93	1.87	60.3	0.00	0.00	1.448	2,109	0.728	0.0003	0.180	5.125	6.0E-04	6.0E-04	6.0E-04	0.00	
45.0	44.0	5	125	1	25	25	2.474	2.474	1.928	0.86	0.74	1.00	833.3	100	0.0	83.3	0.89	1.84	83.3	0.00	0.00	1.657	2,515	0.796	0.0003	0.188	4.726	4.9E-04	4.9E-04	4.9E-04	0.00	
50.0	49.0	5	125	1	25	25	2.786	2.786	2.084	0.80	0.71	1.00	815.5	100	0.0	81.5	0.85	1.64	81.5	0.00	0.00	1.867	2,648	0.847	0.0003	0.197	4.401	4.8E-04	4.8E-04	4.8E-04	0.00	

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-16 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Calc GWT (feet): 6** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**



Total Thickness of Liquefiable Layers: 11.5 feet

Estimated Total Ground Subsidence: 2.4 inches

Liquefaction Analyses with Groundwater at a Depth of 22.5 Feet

CPT-LIQUEFY.XLS - A SPREADSHEET FOR EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL USING CPT DATA
 Developed 2003 by Shelton L. Stinger, GE, Earth Systems Southwest

Project: Doris and Patterson
 Job No: VT-24867-10
 Date: 9/28/2017
 Sounding: CPT-1

Liquefaction Analysis using 1998 NCEER (Robertson & Wride) method
 Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Q_{cr}/N(160)$ ratio = 5

Plot: 1
 Method Used: 1
 Averaging Increment: 3
 Induced CSR (M=7.5) = 0.65*PGA*(ρ_{op}/ρ)²/rd/MSF
 Clean Sand $Q_{cr1n} = C_0 * K_{cs} * K_{cs} * Q_{cs}$
 SF = $CSR_{7.5} / K_{cs} / CSR$

1998 NCEER (Robertson & Wride)
 Ignore 1st/last increment into sand/silt soils: 1 yes
 Ignore intermediate upper: 1.5 m
 Unit Weight of unsaturated soils: 115 pcf
 Unit Weight of saturated soils: 130 pcf
 Limiting ic for liquefiable soils: 2.75
 Limiting ic for K_{cs} : 2.8
 Avg SF of Liquefiable Layers: 0.35
 Min SF of Liquefiable Layers: 0.22

Use Moss @ P_{cs} : 15%
 Use Tokimatsu & Seed (0) or Ishihara & Yoshimine (1): 0
 Required SF: 1.30
 Max $\Delta N_{i(60)}$ - post liquefied: 5.5
 Max $\Delta N_{i(60)}$ - non liquefied: 10.0

Total Liquefied Thickness (feet)	8.9
Total Induced Subsidence (inches)	5.5
	10.0

Depth (feet)	Tip Friction			Total Eff.			Max			Moss			Liquef. Rel.			Clean			Induced Liquefac.			Volumetric											
	Qc (tsf)	Fs (tsf)	Ratio	Unit Wt. (pcf)	Stress (tsf)	Stress (tsf)	q _{c1} (MPa)	q _{c2} (MPa)	Q (MPa)	n	C _q	1.70	Δqc (MPa)	q _{c,max} (MPa)	eff	ρ _{op} (%)	Suscept.	Dens. (pcf)	Dr (%)	K _{cs}	K _{cs}	Q _{cr1n}	Sand	1.0	K _{cs}	CSR	M=7.5	Safety Factor	N _{i(60)}	Q _{cr1n}	N _{i(60)}	Equiv. FC-Adj.	Equiv. N _{i(60)}
0.49	15	0.05	0.13	115	0.028	0.028	1.000	0.13	0.53	1.70	59.73	6.06	0.00	6.06	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.341	Non-Liq.	5.6	10.7	0.00	0.00	
0.98	30	0.04	0.12	115	0.057	0.057	1.000	0.12	0.55	1.70	59.36	5.11	0.00	5.11	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.341	Non-Liq.	5.5	9.2	0.00	0.00	
1.48	45	0.03	0.10	115	0.085	0.085	0.999	0.23	0.53	1.70	59.65	7.07	0.00	7.07	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.340	Non-Liq.	5.6	12.4	0.00	0.00	
1.97	60	0.02	0.08	115	0.113	0.113	0.997	0.38	0.51	1.70	59.23	10.07	0.00	10.07	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.340	Non-Liq.	5.7	17.4	0.00	0.00	
2.46	75	0.02	0.06	115	0.141	0.141	0.996	0.52	0.47	1.70	58.76	6.99	0.82	7.81	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.340	Non-Liq.	4.9	14.1	0.00	0.00	
2.95	90	0.02	0.05	115	0.170	0.170	0.995	0.75	0.44	1.70	46.06	4.69	2.11	6.80	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.339	Non-Liq.	4.2	10.9	0.00	0.00	
3.44	105	0.02	0.04	115	0.198	0.198	0.994	1.00	0.41	1.70	35.41	3.62	2.82	6.44	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.339	Non-Liq.	3.9	9.1	0.00	0.00	
3.94	120	0.02	0.03	115	0.226	0.226	0.993	1.30	0.39	1.70	34.50	3.53	2.90	6.43	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.338	Non-Liq.	3.9	8.9	0.00	0.00	
4.43	135	0.02	0.03	115	0.255	0.255	0.992	1.60	0.37	1.70	43.94	4.49	1.70	5.96	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.338	Non-Liq.	4.4	10.2	0.00	0.00	
4.92	150	0.02	0.02	115	0.283	0.283	0.990	1.90	0.36	1.70	45.98	4.70	0.52	5.22	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.338	Non-Liq.	4.7	9.8	5.2	16.1	
5.41	165	0.02	0.02	115	0.311	0.311	0.989	2.20	0.35	1.70	36.94	3.79	0.78	4.57	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.337	Non-Liq.	4.5	8.4	6.6	15.0	
5.91	180	0.02	0.02	115	0.340	0.340	0.988	2.50	0.34	1.70	23.40	2.43	2.32	4.75	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.337	Non-Liq.	3.8	6.4	10.0	16.4	
6.40	195	0.02	0.02	115	0.368	0.368	0.987	2.75	0.32	1.70	21.64	2.25	2.27	4.53	2	2	2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.336	Non-Liq.	3.7	6.0	10.0	16.0	
6.89	210	0.02	0.02	115	0.396	0.396	0.986	2.94	0.30	1.70	17.84	1.87	1.99	3.86	2	2	2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.336	Non-Liq.	3.6	5.1	0.00	0.00	
7.38	225	0.02	0.02	115	0.424	0.424	0.985	3.09	0.28	1.70	10.94	1.18	2.46	3.64	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.336	Non-Liq.	3.2	3.6	0.00	0.00	
7.87	240	0.02	0.02	115	0.453	0.453	0.984	3.24	0.26	1.70	11.91	1.28	1.54	2.82	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.335	Non-Liq.	3.4	3.7	0.00	0.00	
8.37	255	0.02	0.02	115	0.481	0.481	0.983	3.39	0.24	1.70	16.04	1.71	1.46	3.17	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.335	Non-Liq.	3.7	4.6	0.00	0.00	
8.86	270	0.02	0.02	115	0.509	0.509	0.982	3.54	0.22	1.70	23.61	2.23	2.00	4.22	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.335	Non-Liq.	3.8	5.4	10.0	16.4	
9.35	285	0.02	0.02	115	0.538	0.538	0.981	3.69	0.20	1.70	16.64	1.66	1.34	2.35	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.334	Non-Liq.	4.4	10.3	8.9	19.2	
9.84	300	0.02	0.02	115	0.566	0.566	0.979	3.84	0.18	1.70	56.54	5.17	0.84	6.01	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.334	Non-Liq.	4.7	12.1	6.4	18.5	
10.33	315	0.02	0.02	115	0.594	0.594	0.978	3.99	0.16	1.70	40.38	3.70	1.09	4.79	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.334	Non-Liq.	4.4	9.3	7.9	17.2	
10.82	330	0.02	0.02	115	0.623	0.623	0.977	4.14	0.14	1.70	24.49	2.23	2.08	4.31	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.333	Non-Liq.	3.8	6.5	10.0	16.6	
11.31	345	0.02	0.02	115	0.651	0.651	0.976	4.29	0.12	1.70	23.40	2.16	2.02	4.19	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.333	Non-Liq.	3.8	6.4	0.00	0.00	
11.81	360	0.02	0.02	115	0.679	0.679	0.975	4.44	0.10	1.70	18.70	1.75	2.01	4.27	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.332	Non-Liq.	3.6	5.5	0.00	0.00	
12.30	375	0.02	0.02	115	0.707	0.707	0.974	4.59	0.08	1.70	24.02	2.25	2.22	4.47	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.332	Non-Liq.	3.8	6.6	0.00	0.00	
12.80	390	0.02	0.02	115	0.736	0.736	0.973	4.74	0.06	1.70	28.12	2.61	2.35	4.96	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.332	Non-Liq.	3.9	7.5	10.0	17.5	
13.29	405	0.02	0.02	115	0.764	0.764	0.972	4.89	0.04	1.70	28.57	2.65	2.13	2.68	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.331	Non-Liq.	3.8	7.9	10.0	17.9	
13.78	420	0.02	0.02	115	0.792	0.792	0.971	5.04	0.02	1.70	43.84	4.12	2.01	6.13	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.331	Non-Liq.	4.2	10.6	10.0	20.6	
14.27	435	0.02	0.02	115	0.821	0.821	0.970	5.19	0.01	1.70	49.50	4.72	1.66	6.38	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.331	Non-Liq.	4.4	11.5	10.0	21.5	
14.76	450	0.02	0.02	115	0.849	0.849	0.969	5.34	0.00	1.70	84.28	8.24	0.75	8.99	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.330	Non-Liq.	5.0	16.9	5.8	22.8	
15.26	465	0.02	0.02	115	0.877	0.877	0.968	5.49	0.00	1.70	67.94	6.67	0.98	7.64	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.330	Non-Liq.	4.8	14.4	6.9	21.2	
15.75	480	0.02	0.02	115	0.906	0.906	0.967	5.64	0.00	1.70	47.44	4.69	1.41	6.10	1	1	1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.330	Non-Liq.	4.4	10.9	9.1	20.1	
16.24	495	0.02	0.02	115	0.934	0.934	0.966	5.79	0.00	1.70	10.9	47.54	4.72	1.63	6.36	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.329	Non-Liq.	4.4	10.9	9.1	20.1	
16.73	510	0.02	0.02	115	0.962	0.962	0.965	5.94	0.00	1.70	10.96	4.72	1.66	6.36	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.329	Non-Liq.	2.7	4.4	0.00	0.00	
17.22	525	0.02	0.02	115	0.990	0.990	0.964	6.09	0.00	1.70	9.07	1.00	3.80	4.80	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.328	Non-Liq.	2.9	3.5	0.00	0.00	
17.72	540	0.02	0.02	115	1.019	1.019	0.962	6.24	0.00	1.70	9.15	1.02	3.08	4.10	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.328	Non-Liq.	3.0	3.4	0.00	0.00	
18.21	555	0.02	0.02	115	1.047	1.047	0.961	6.39	0.00	1.70	7.34	0.84	3.30	4.14	0	0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.328	Non-Liq.	2.8	3.0	0.00	0.00	
18.70	570	0.02	0.02	115	1.075																												

Depth (feet)	Tip Qc (tsf)	Friction		Total Stress (pcf)	Total Stress (tsf)	Eff. p (tsf)	F	Max n	Cq	Q	qc1 MPa	Δqc MPa	qC-moist MPa	Kc	Moss eff	Verde Q	Liquef. Suscept. (0 or 1)	Rel. Dens. (Dr %)	Clean Sand K _{cs}	Clean OcIn K _c	Clean K _c	1.0 K _c	Induced M=7.5 CSR	Induced CRR	Induced Factor	Liquefac. Safety	QcIn Ratio	N ₍₁₀₀₎ Ratio	FC Adj. N ₍₁₀₀₎	Equiv. ΔN ₍₁₀₀₎	Equiv. N ₍₁₀₀₎	FC Adj. N ₍₁₀₀₎	Equiv. N ₍₁₀₀₎	Volumetric Strain (%)
		Qc (tsf)	Fs (tsf)																															
24.11	11.53	0.71	6.11	1.10	1.423	1.381	0.945	0.99	0.77	7.37	0.95	5.38	6.33	0.95	0.498	0.502	0.0	0	1.00	0.95	1.00	0.95	0.498	0.502	Non-Liq.	2.5	3.3	3.3	3.3	0.00				
24.61	7.50	0.48	1.49	3.07	1.455	1.397	0.943	1.56	0.76	0.81	23.44	2.68	1.19	3.87	0.506	0	0	85	1.02	1.00	1.00	1.00	0.506	0.506	Non-Liq.	4.0	6.1	6.1	6.1	0.00				
25.10	7.65	0.75	0.50	14.26	1.487	1.414	0.941	0.51	0.86	120.25	12.40	0.00	12.40	1.00	1.85	1.02	1.00	87	1.07	1.00	1.00	1.00	0.510	0.510	Non-Liq.	5.7	21.2	21.2	21.2	1.18				
25.59	7.80	1.13	0.72	16.19	1.519	1.431	0.940	0.72	0.53	126.28	13.36	0.26	13.62	1.02	1.85	1.07	1.00	87	1.07	1.00	1.00	1.00	0.510	0.510	Non-Liq.	5.6	22.8	22.8	22.8	1.05				
26.08	7.95	1.13	0.80	16.39	1.551	1.447	0.938	0.81	0.53	135.76	14.49	0.37	14.85	1.03	1.85	1.07	1.00	90	1.07	1.00	1.00	1.00	0.514	0.514	Non-Liq.	5.6	24.6	24.6	24.6	0.84				
26.57	8.10	1.55	1.51	9.79	1.583	1.464	0.936	1.54	0.64	81	77.43	8.73	1.23	9.95	1.14	1.85	1.07	90	1.07	1.00	1.00	1.00	0.514	0.514	Non-Liq.	5.6	24.6	24.6	24.6	1.38				
27.07	8.25	4.77	1.54	3.22	1.615	1.481	0.934	3.32	0.78	77	33.64	4.07	3.29	7.36	1.81	1.85	1.07	93	3.38	1.00	1.00	1.00	0.521	0.521	Non-Liq.	4.1	3.9	3.9	3.9	2.00				
27.56	8.40	93.00	1.23	3.22	1.647	1.497	0.932	1.34	0.64	80	69.31	7.80	1.00	8.00	1.13	1.85	1.07	93	3.38	1.00	1.00	1.00	0.521	0.521	Non-Liq.	4.1	3.9	3.9	3.9	1.49				
28.05	8.55	35.83	0.96	3.43	1.679	1.514	0.930	2.79	0.80	75	24.38	2.96	2.65	5.61	1.89	2.55	2.67	93	3.78	1.00	1.00	1.00	0.524	0.524	Non-Liq.	3.2	4.9	4.9	4.9	2.00				
28.54	8.70	93.27	0.86	8.93	1.711	1.530	0.928	0.94	0.61	80	89.24	7.62	0.51	8.13	1.07	1.85	1.07	93	3.78	1.00	1.00	1.00	0.524	0.524	Non-Liq.	3.2	4.9	4.9	4.9	1.59				
29.03	9.00	311.00	1.03	4.42	1.743	1.547	0.925	0.43	0.50	83	188.80	19.50	0.00	19.50	1.00	1.85	1.07	93	3.78	1.00	1.00	1.00	0.533	0.533	Non-Liq.	0.26	5.0	5.0	5.0	0.00				
29.53	9.00	311.00	2.10	0.67	1.775	1.564	0.923	0.68	0.50	82	240.57	25.76	0.21	25.97	1.01	241.79	1.51	100	1.00	1.00	1.00	1.00	0.533	0.533	Non-Liq.	6.0	40.1	40.1	40.1	0.00				
30.02	9.15	336.93	3.81	1.13	1.807	1.580	0.920	1.14	0.50	82	258.85	28.63	0.77	29.40	1.03	260.07	1.66	100	1.01	1.00	1.00	1.00	0.538	0.538	Non-Liq.	6.0	40.1	40.1	40.1	0.00				
30.51	9.30	310.67	3.89	1.25	1.839	1.597	0.918	1.26	0.52	81	233.60	26.39	0.92	27.31	1.03	236.82	1.72	100	1.05	1.00	1.00	1.00	0.541	0.541	Non-Liq.	5.8	45.2	45.2	45.2	0.00				
31.00	9.45	268.03	2.85	1.06	1.871	1.614	0.915	1.07	0.52	80	202.21	22.42	0.69	23.11	1.03	203.44	1.71	100	1.04	1.00	1.00	1.00	0.541	0.541	Non-Liq.	5.6	42.0	42.0	42.0	0.00				
31.50	9.60	276.97	2.18	0.79	1.903	1.630	0.913	0.79	0.50	81	209.65	22.72	0.35	23.07	1.02	210.89	1.60	100	1.00	1.00	1.00	1.00	0.545	0.545	Non-Liq.	5.9	36.0	36.0	36.0	0.00				
31.99	9.75	286.00	1.85	0.65	1.935	1.647	0.910	0.65	0.50	80	215.42	23.11	0.18	23.29	1.01	216.66	1.54	100	1.00	1.00	1.00	1.00	0.545	0.545	Non-Liq.	6.0	37.2	37.2	37.2	0.00				
32.48	9.90	280.93	1.84	0.65	1.967	1.664	0.907	0.66	0.50	80	210.50	22.62	0.19	22.80	1.01	211.76	1.55	100	1.00	1.00	1.00	1.00	0.547	0.547	Non-Liq.	6.0	36.2	36.2	36.2	0.00				
32.97	10.05	295.90	2.07	0.70	1.999	1.680	0.904	0.70	0.50	79	220.60	23.87	0.24	24.12	1.01	221.86	1.55	100	1.00	1.00	1.00	1.00	0.548	0.548	Non-Liq.	6.0	35.5	35.5	35.5	0.00				
33.46	10.20	328.43	2.25	0.68	2.031	1.697	0.901	0.69	0.50	79	243.86	26.47	0.23	26.69	1.01	245.12	1.51	100	1.00	1.00	1.00	1.00	0.550	0.550	Non-Liq.	6.0	37.2	37.2	37.2	0.00				
33.96	10.35	371.70	1.76	0.47	2.063	1.713	0.898	0.48	0.50	79	274.79	29.17	0.00	29.17	1.00	276.07	1.37	100	1.00	1.00	1.00	1.00	0.551	0.551	Non-Liq.	6.0	40.6	40.6	40.6	0.00				
34.45	10.50	383.03	1.34	0.35	2.095	1.730	0.894	0.35	0.50	78	281.83	29.21	0.00	29.21	1.00	283.11	1.28	100	1.00	1.00	1.00	1.00	0.553	0.553	Non-Liq.	6.3	43.7	43.7	43.7	0.00				
34.94	10.65	381.17	1.30	0.34	2.127	1.747	0.891	0.34	0.50	78	279.10	28.87	0.00	28.87	1.00	280.39	1.27	100	1.00	1.00	1.00	1.00	0.554	0.554	Non-Liq.	5.5	50.7	50.7	50.7	0.00				
35.43	10.80	359.20	1.46	0.41	2.159	1.763	0.888	0.41	0.50	77	261.69	27.45	0.00	27.45	1.00	262.98	1.34	100	1.00	1.00	1.00	1.00	0.555	0.555	Non-Liq.	5.5	50.7	50.7	50.7	0.00				
35.93	10.95	372.67	1.49	0.40	2.191	1.780	0.884	0.40	0.50	77	270.26	28.37	0.00	28.37	1.00	271.56	1.33	100	1.01	1.00	1.00	1.00	0.556	0.556	Non-Liq.	6.4	41.3	41.3	41.3	0.00				
36.42	11.10	378.83	1.33	0.35	2.223	1.797	0.880	0.35	0.50	77	273.47	28.38	0.00	28.38	1.00	274.77	1.29	100	1.00	1.00	1.00	1.00	0.557	0.557	Non-Liq.	5.4	42.4	42.4	42.4	0.00				
36.91	11.25	384.50	1.25	0.32	2.255	1.813	0.877	0.33	0.50	76	276.29	28.47	0.00	28.47	1.00	277.60	1.26	100	1.00	1.00	1.00	1.00	0.557	0.557	Non-Liq.	5.5	49.7	49.7	49.7	0.00				
37.40	11.40	406.70	1.33	0.33	2.287	1.830	0.873	0.33	0.50	76	290.98	30.08	0.00	30.08	1.00	292.29	1.25	100	1.00	1.00	1.00	1.00	0.557	0.557	Non-Liq.	5.5	50.2	50.2	50.2	0.00				
37.89	11.55	459.80	2.35	0.51	2.319	1.847	0.869	0.51	0.50	76	327.64	35.55	0.01	35.57	1.00	328.96	1.33	100	1.00	1.00	1.00	1.00	0.558	0.558	Non-Liq.	5.5	52.8	52.8	52.8	0.00				
38.39	11.70	417.57	3.05	0.73	2.351	1.863	0.865	0.73	0.50	75	296.08	33.01	0.29	33.29	1.01	297.41	1.48	100	1.00	1.00	1.00	1.00	0.558	0.558	Non-Liq.	6.4	51.4	51.4	51.4	0.00				
38.88	11.85	255.00	2.08	0.82	2.383	1.880	0.861	0.82	0.51	75	278.77	19.86	0.39	20.26	1.02	180.10	1.66	100	1.00	1.00	1.00	1.00	0.558	0.558	Non-Liq.	5.1	48.7	48.7	48.7	0.00				
39.37	12.00	60.43	1.57	2.60	2.415	1.896	0.857	2.68	0.75	6.64	35.67	4.73	2.59	7.32	1.55	36.83	2.53	35	2.92	1.00	1.00	1.00	0.558	0.558	Non-Liq.	4.0	9.1	9.1	9.1	0.00				
39.86	12.15	68.10	1.44	2.11	2.447	1.913	0.852	1.18	0.72	6.65	40.77	5.28	2.00	7.28	1.38	41.95	2.43	41	2.42	1.00	1.00	1.00	0.557	0.557	Non-Liq.	4.3	9.9	9.9	9.9	1.88				
40.35	12.30	74.60	1.05	1.41	2.479	1.930	0.848	1.45	0.68	6.66	45.64	5.63	1.13	6.76	1.20	46.86	2.28	45	1.88	1.00	1.00	1.00	0.557	0.557	Non-Liq.	4.5	10.1	10.1	10.1	1.84				
40.85	12.45	54.97	1.14	2.07	2.511	1.946	0.843	2.15	0.74	6.64	31.83	4.17	1.95	6.12	1.47	33.03	2.51	41	2.80	1.00	1.00	1.00	0.556	0.556	Non-Liq.	4.1	8.1	8.1	8.1	2.07				
41.34	12.60	53.87	1.57	2.91	2.543	1.963	0.839	3.02	0.78	6.61	30.37	4.16	2.98	7.14	1.72	31.52	2.62	29	3.42	1.00	1.00	1.00	0.556	0.556	Non-Liq.	3.9	8.1	8.1	8.1	2.06				
41.83	12.75	48.03	1.38	2.88	2.575	1.980	0.834	3.00	0.79	6.61	26.58	3.67	2.94	6.60	1.80	27.72	2.66	24	3.70	1.00	1.00	1.00	0.555	0.555	Non-Liq.	3.8	7.3	7.3	7.3	2.16				
42.32	12.90	76.17	0.97	1.27	2.607	1.996	0.830	1.31	0.67	6.65	45.78	5.63	6.95	6.58	1.17	47.01	2.25	46	1.80	1.00	1.00	1.00	0.554	0.554	Non-Liq.	4.6	10.2	10.2	10.2	1.85				
42.81	13.05	62.30	0.97	1.56	2.639	2.013	0.825	1.61	0.71	6.63	36.10	4.60	1.31	5.91	1.28	37.30	2.39	41	2.92	1.00	1.00	1.00	0.553	0.553	Non-Liq.	4.3	8.6	8.6	8.6	2.00				
43.31	13.20	51.67	0.95	1.84	2.671	2.030	0.820	1.92	0.74	6.62	28.89	3.80	1.66	5.46	1.00	30.07	2.51	0	3.6	2.26	1.00	1.00	0.553	0.553	Non-Liq.	4.3	8.6	8.6	8.6	2.00				
43.80	13.35	25.43	0.98	3.83	2.703	2.046	0.816	4.17	0.8																									

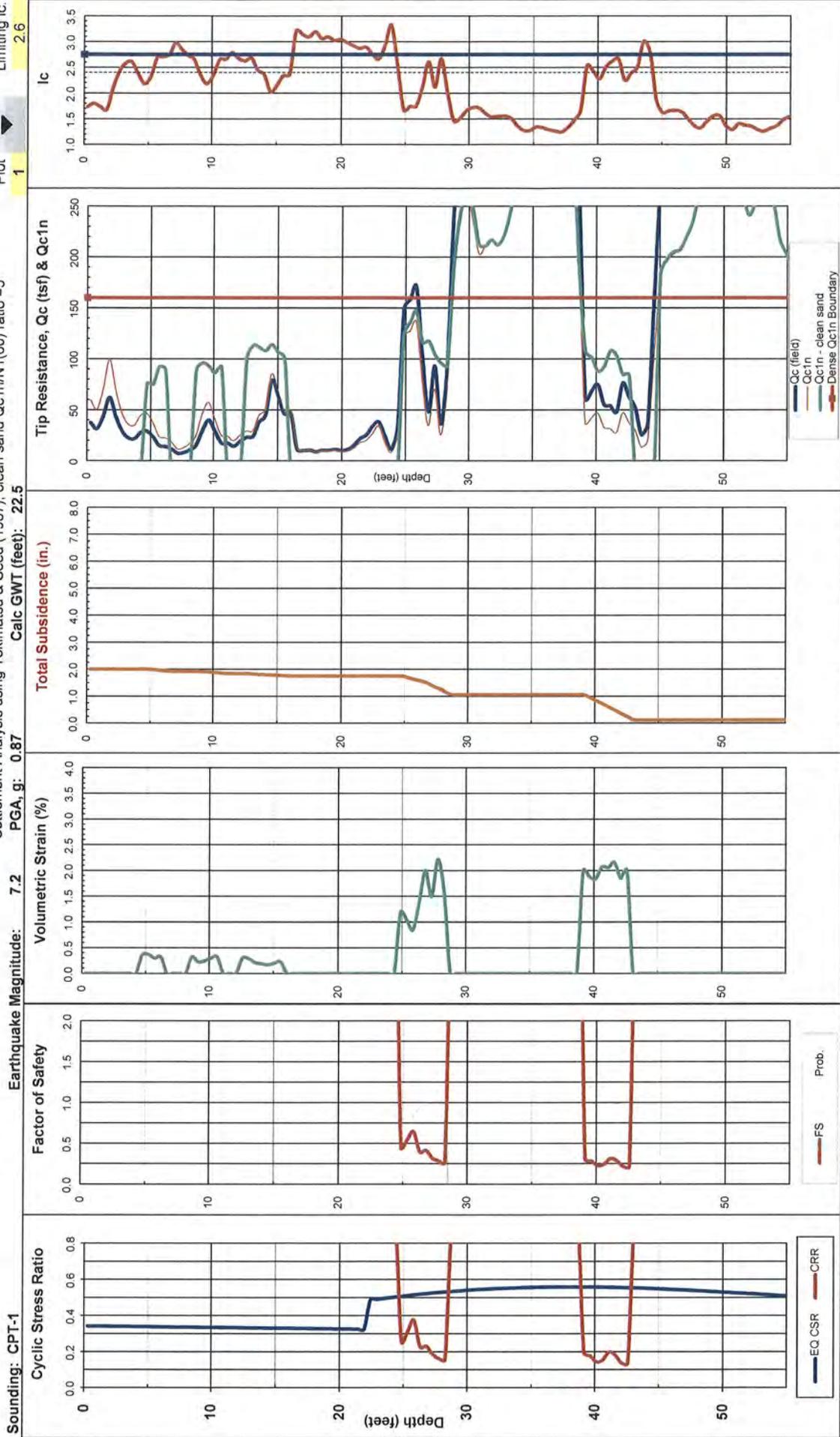
Depth (feet)	Tip		Friction		Total Unit Wt. (pcf)	Total Stress p _c (tsf)	Eff. Stress p _c (tsf)	F %	n	Cq	Max Q	Moss			Moss			K _c	Qc1n	lc	Qc	K _v	K _g	Clean			Induced Liquefac.			Qc1n N ₁₍₆₀₎ Ratio	Equiv. FC Adj. N ₁₍₆₀₎ / ΔN ₁₍₆₀₎	Equiv. N ₁₍₆₀₎	N ₁₍₆₀₎	Volumetric Strain (%)
	Qc (tsf)	Fs (tsf)	Fs Ratio	qc MPa								qc1 MPa	Δqc MPa	qc1 _{mod} MPa	eff	q _{c1}	Δq _c							q _{c1} _{mod}	eff	Qc1n	lc	Qc	M=7.5 CSR					
55.61	16.95	305.63	1.96	0.64	29.27	130	3.471	2.445	0.698	0.65	0.50	0.66	188.49	21.29	0.17	21.46	1.01	190.01	1.58	1.00	1.00	1.00	1.00	1.00	190.0	0.72	Inf.	0.506	Non-Liq.	5.9	32.2	5.8	38.0	0.00
56.10	17.10	288.20	1.93	0.67	27.60	130	3.503	2.462	0.693	0.67	0.50	0.66	177.04	20.05	0.20	20.26	1.01	178.57	1.61	1.00	1.00	1.00	1.00	1.00	178.6	0.71	Inf.	0.504	Non-Liq.	5.8	30.6	5.2	35.7	0.00
56.59	17.25	306.03	1.79	0.58	29.31	130	3.535	2.479	0.689	0.59	0.50	0.65	187.45	20.96	0.10	21.06	1.00	188.98	1.55	1.00	1.00	1.00	1.00	1.00	189.0	0.71	Inf.	0.502	Non-Liq.	6.0	31.7	6.1	37.8	0.00
57.09	17.40	253.13	1.60	0.63	24.24	130	3.567	2.495	0.684	0.64	0.50	0.65	154.19	17.25	0.16	17.41	1.01	155.72	1.64	1.00	1.00	1.00	1.00	1.00	155.3	0.71	0.429	0.500	0.61	5.8	26.9	4.1	31.1	0.64
57.58	17.55	103.20	1.70	1.65	9.88	130	3.599	2.512	0.680	1.69	0.67	0.56	53.17	7.34	1.37	8.72		54.50	2.27	0	1.00	1.00	1.00	1.00	0.84			0.498	Non-Liq.	4.5	11.9			0.00
58.07	17.70	40.27	1.88	4.67	3.86	130	3.631	2.529	0.675	4.99	0.86	0.47	16.82	2.88	4.98	7.86		17.95	2.95	0	1.00	1.00	1.00	0.84			0.496	Non-Liq.	3.2	5.6			0.00	
58.56	17.85	25.27	1.50	5.93	2.42	130	3.663	2.545	0.671	6.59	0.94	0.44	9.44	1.73	5.36	7.10		10.50	3.22	0	1.00	1.00	1.00	0.84			0.494	Non-Liq.	2.7	3.9			0.00	
59.06	18.00	10.90	0.77	7.02	1.04	130	3.695	2.562	0.667	9.17	1.00	0.41	3.25	0.64	5.36	6.00		4.25	3.68	0	1.00	1.00	1.00	0.84			0.492	Non-Liq.	1.8	2.4			0.00	
59.55	18.15	11.33	0.37	3.22	1.09	130	3.727	2.578	0.663	4.17	1.00	0.41	3.40	0.62	3.23	3.86		4.40	3.47	0	1.00	1.00	1.00	0.84			0.490	Non-Liq.	2.2	2.0			0.00	
60.04	18.30	34.03	0.53	1.56	3.26	130	3.759	2.595	0.659	1.69	0.80	0.49	14.55	2.26	1.26	3.52		16.87	2.72	0	1.07	1.00	1.00	0.84			0.488	Non-Liq.	3.7	4.6			0.00	
60.53	18.45	20.67	0.75	3.65	1.98	130	3.791	2.612	0.655	4.17	0.92	0.43	7.41	1.30	3.73	5.03		8.48	3.19	0	1.00	1.00	1.00	0.83			0.486	Non-Liq.	2.8	3.1			0.00	
61.02	18.60	46.97	0.75	1.59	4.50	130	3.823	2.628	0.651	1.69	0.76	0.50	20.99	3.04	1.29	4.33		22.32	2.59	0	1.00	1.00	1.00	0.83			0.484	Non-Liq.	3.9	5.7			0.00	
61.52	18.75	163.00	0.78	0.42	17.52	130	3.855	2.645	0.647	0.43	0.51	0.63	106.89	11.16	0.00	11.16	1.00	108.45	1.67	1	80	1.00	1.00	108.5	0.69	0.199	0.482	0.29	5.7	19.0	2.7	21.7	1.37	
62.01	18.90	296.13	1.22	0.41	28.36	130	3.887	2.662	0.643	0.41	0.50	0.63	174.88	18.63	0.00	18.63	1.00	176.47	1.49	1	100	1.00	1.00	176.5	0.69	Inf.	0.480	Non-Liq.	6.1	29.0	6.3	35.3	0.00	
62.50	19.05	385.73	1.57	0.41	36.94	130	3.919	2.678	0.640	0.41	0.50	0.63	227.56	24.66	0.00	24.66	1.00	229.15	1.39	1	100	1.00	1.00	229.2	0.69	Inf.	0.479	Non-Liq.	6.3	36.5	9.3	45.8	0.00	
62.99	19.20	409.83	1.59	0.39	39.25	130	3.951	2.695	0.636	0.39	0.50	0.63	241.12	26.04	0.00	26.04	1.00	242.71	1.36	1	100	1.00	1.00	242.7	0.69	Inf.	0.477	Non-Liq.	6.2	38.3	10.0	48.3	0.00	
63.48	19.35	360.83	1.51	0.44	34.55	130	3.983	2.711	0.633	0.45	0.50	0.62	211.44	23.16	0.00	23.16	1.00	213.04	1.44	1	100	1.00	1.00	213.0	0.69	Inf.	0.475	Non-Liq.	6.2	34.5	8.1	42.6	0.00	
63.98	19.50	395.03	1.52	0.38	37.83	130	4.015	2.728	0.629	0.39	0.50	0.62	230.91	24.86	0.00	24.86	1.00	232.52	1.37	1	100	1.00	1.00	232.5	0.68	Inf.	0.473	Non-Liq.	6.3	36.8	9.7	46.5	0.00	
64.47	19.65	363.23	1.60	0.42	36.70	130	4.047	2.745	0.626	0.42	0.50	0.62	223.28	24.32	0.00	24.32	1.00	224.89	1.40	1	100	1.00	1.00	224.9	0.68	Inf.	0.472	Non-Liq.	6.3	36.0	9.0	45.0	0.00	

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

Method Used: 1 1998 NCEER (Robertson & Wride)
 Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1n/N1(60)$ ratio = 5
 Calc GWT (feet): 22.5

Sounding: CPT-1
 Plot: 1
 Limiting I_c : 2.6



Total Thickness of Liquefiable Layers: 8.9 feet

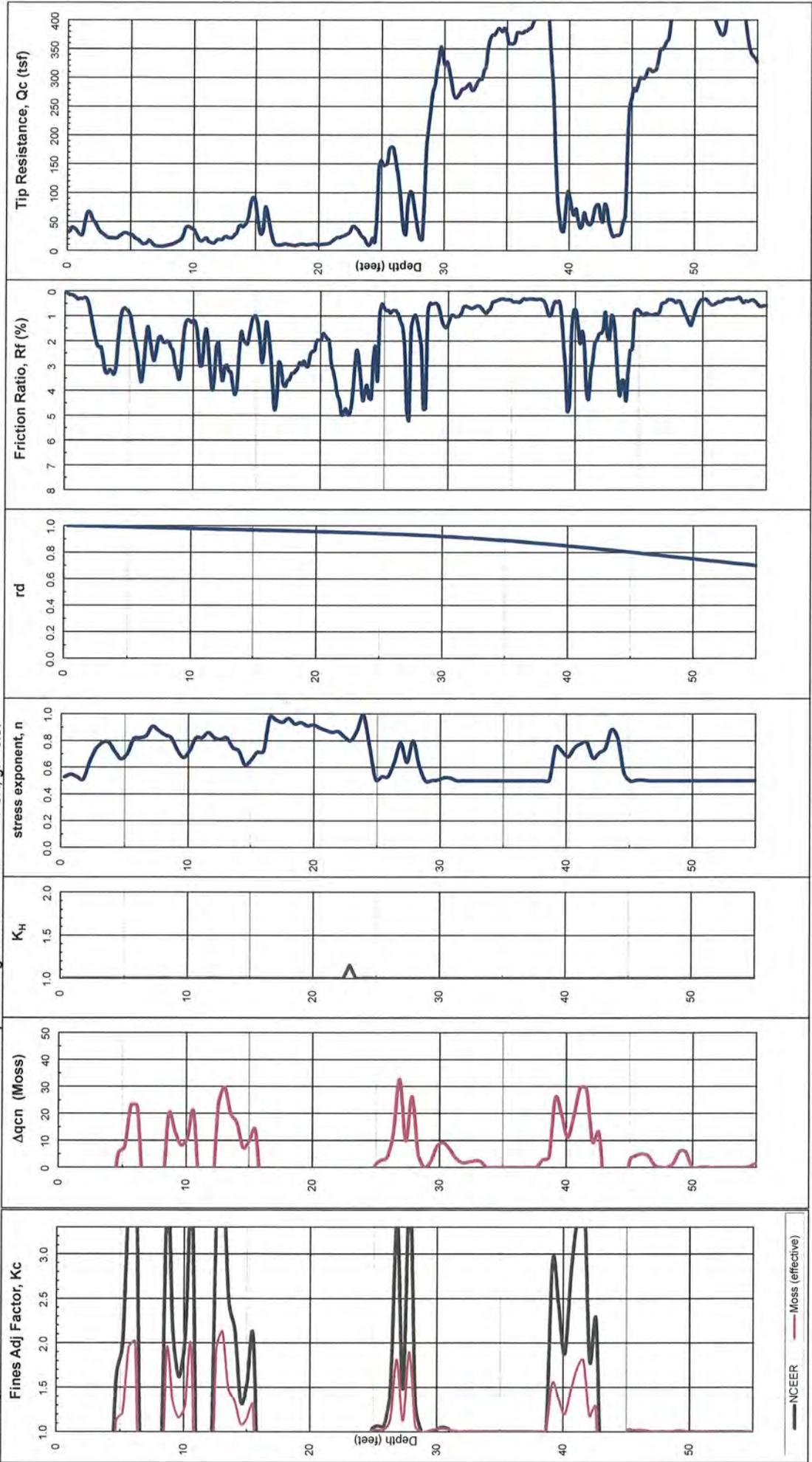
Estimated Total Ground Subsidence (Settlement): 2.0 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

3 avg increment = 0.15m Qc1n/N1(60): 5
 ignore 1st/last increment into sand/silt soils: 0
 Sounding: CPT-1

Earthquake Magnitude: 7.2 PGA, g: 0.87



LIQUEFY-V.2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Developed 2008 by Shelton L. Stringer, PE, GE, PG - Earth Systems Southwest

Project: Doris & Patterson K-8 School
 Job No: VT-24857-10
 Date: 9/29/2017
 Boring: B-12

Methods: Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)
 Journal of Geotechnical and Environmental Engineering (JGEE), October, 2001, Vol. 127, No. 10, ASCE
 Settlement Analysis from Tokimatsu and Seed (1987), JGEE, Vol. 113, No. 8, ASCE
 Modified by Pradei, JGEE, Vol. 124, No. 4, ASCE

EARTHQUAKE INFORMATION:
 Magnitude: 7.2 7.5
 Energy Correction to N60 (C_E): 1.33
 Drive Rod Corr. (C_R): 1
 Rod Length above ground (feet): 3.0
 Borehole Dia. Corr. (C_B): 1.00
 Sampler Liner Correction for SPT?: 1
 Cal Mod/ SPT Ratio: 0.63

SPT N VALUE CORRECTIONS:
 Automatic Hammer
 Default
 Required SF: 1.30
 Minimum Calculated SF: 0.68

Total (ft)
 Liquefied
 Thickness
 2

Total (in.)
 Induced
 Subsidence
 1.1

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Base Cal	Liquif. Suscept.	SPT N	Depth (feet)	Fines Content (%)	Rod Length (feet)	Tot. Stress Eff. Stress at SPT po (tsf)	C _W	C _R	C _S	N ₍₆₀₎	Rel. Density D _r (%)	Trigger Equiv. FC Adj. ΔN ₍₆₀₎ N _{(60)CE}	K _r	Available Induced CSR* CRR	Safety Factor	Liquefac. Post FC Adj. ΔN ₍₆₀₎ N _{(60)CE}	Volume Strain (%)	Induced Subsidence (in.)	p (tsf)	G _{max} (tsf)	τ _{sv} (tsf)	τ _{av} /G _{max}	a	b	Shear Strain γ	Strain E ₁₅	Strain Enc	Dry Sand Subsidence (in.)							
																													Depth Mod	Total Unit Wt. (pcf)	Depth (feet)	Content (%)	Length (feet)	at SPT po (tsf)	rd
4.0	13	50	1	122	45	3.0	6.0	0.183	0.183	0.99	1.70	0.75	1.00	85.0	100	100	95.0	1.00	1.400	0.509	Non-Liq.	10.0	95.0	0.01	0.00	0.123	71.4	0.069	0.0001	0.129	22.546	1.8E-04	2.8E-05	2.6E-05	0.00
5.0	8	50	1	122	45	4.0	7.0	0.244	0.244	0.99	1.70	0.75	1.00	85.0	100	100	95.0	1.00	1.400	0.506	Non-Liq.	10.0	95.0	0.01	0.00	0.163	82.5	0.092	0.0001	0.130	18.971	2.0E-04	3.1E-05	2.9E-05	0.00
6.0	8	5	1	122	45	5.0	8.0	0.305	0.305	0.99	1.70	0.75	1.00	8.6	35	6.7	15.3	1.00	0.165	0.506	Non-Liq.	6.7	15.3	0.35	0.04	0.204	50.1	0.114	0.0002	0.132	16.594	1.4E-03	1.9E-03	1.7E-03	0.04
12.0	4	1	122	63	10.0	13.0	0.610	0.610	0.98	1.32	0.76	1.10	5.9	29	6.2	12.0	1.00	0.130	0.501	Non-Liq.	6.2	12.0	0.73	0.53	0.408	65.5	0.226	0.0003	0.140	10.948	2.2E-03	4.0E-03	3.7E-03	0.53	
16.5	6	1	122	63	15.0	18.0	0.915	0.915	0.97	1.08	0.86	1.10	8.2	34	6.5	14.8	1.00	0.160	0.495	Non-Liq.	6.5	14.8	0.47	0.25	0.613	86.0	0.335	0.0004	0.148	8.564	1.8E-03	2.9E-03	2.9E-03	0.25	
22.5	11	1	125	79	20.0	23.0	1.225	1.225	0.96	1.00	0.93	1.16	15.9	40	9.7	15.9	0.97	infin.	0.504	Non-Liq.	15.9	0.00	0.00	0.00	0.921	0.000	0.000	0.000	0.156	7.204	7.7E-04	7.7E-04	0.00		
23.5	20	1	125	37	23.5	26.5	1.382	1.382	0.95	0.88	0.96	1.27	28.4	64	10.0	38.4	0.92	1.400	0.526	Non-Liq.	10.0	38.4	0.00	0.00	0.926	1.451	0.496	0.0003	0.160	6.704	7.6E-04	7.6E-04	0.00		
25.0	20	1	125	37	23.5	26.5	1.444	1.444	0.95	0.87	0.97	1.27	28.4	64	10.0	38.4	0.92	1.400	0.540	2.59	10.0	38.4	0.00	0.00	0.967	1.483	0.517	0.0003	0.162	6.528	7.7E-04	7.7E-04	0.00		
27.0	15	1	125	37	25.0	28.0	1.538	1.538	0.94	0.85	0.86	1.20	20.1	54	9.0	29.1	0.91	0.380	0.559	0.68	3.0	23.1	1.36	0.33	1.030	1.396	0.548	0.0004	0.164	6.286	9.9E-04	9.9E-04	0.00		
29.0	20	1	125	37	27.5	30.5	1.694	1.694	0.93	0.83	1.00	1.27	28.0	63	10.0	38.0	0.89	1.400	0.587	2.38	10.0	38.0	0.00	0.00	1.135	1.601	0.597	0.0004	0.168	5.932	8.1E-04	8.1E-04	0.00		
34.0	27	1	125	37	30.0	33.0	1.850	1.850	0.92	0.81	1.00	1.30	37.9	74	10.0	47.9	0.84	1.400	0.638	2.19	10.0	47.9	0.00	0.00	1.240	1.807	0.644	0.0004	0.172	5.626	6.9E-04	6.9E-04	0.00		
37.5	40	1	125	37	35.0	38.0	2.163	2.163	0.89	0.77	1.00	1.30	53.6	87	10.0	63.6	0.81	1.400	0.683	2.05	10.0	63.6	0.00	0.00	1.449	2.147	0.729	0.0003	0.180	5.123	5.8E-04	5.8E-04	0.00		
41.0	46	1	125	5	37.5	40.5	2.319	2.319	0.87	0.76	1.00	1.30	60.3	93	9.5	31.9	0.83	1.400	0.699	2.00	0.0	60.3	0.00	0.00	1.554	2.185	0.765	0.0004	0.184	4.913	6.0E-04	6.0E-04	0.00		
45.0	19	1	125	49	42.5	45.5	2.632	2.632	0.83	0.73	1.00	1.22	22.4	57	9.5	31.9	0.83	1.400	0.673	2.08	9.5	31.9	0.00	0.00	1.763	1.883	0.824	0.0004	0.193	4.554	8.9E-04	8.9E-04	0.00		
52.5	37	1	125	35	47.5	50.5	2.944	2.944	0.78	0.70	1.00	1.30	44.8	80	10.0	54.8	0.75	1.400	0.721	1.94	10.0	54.8	0.00	0.00	1.972	2.385	0.857	0.0004	0.201	4.258	5.9E-04	5.9E-04	0.00		

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Doris & Patterson K-8 School

Project No: VT-24867-10

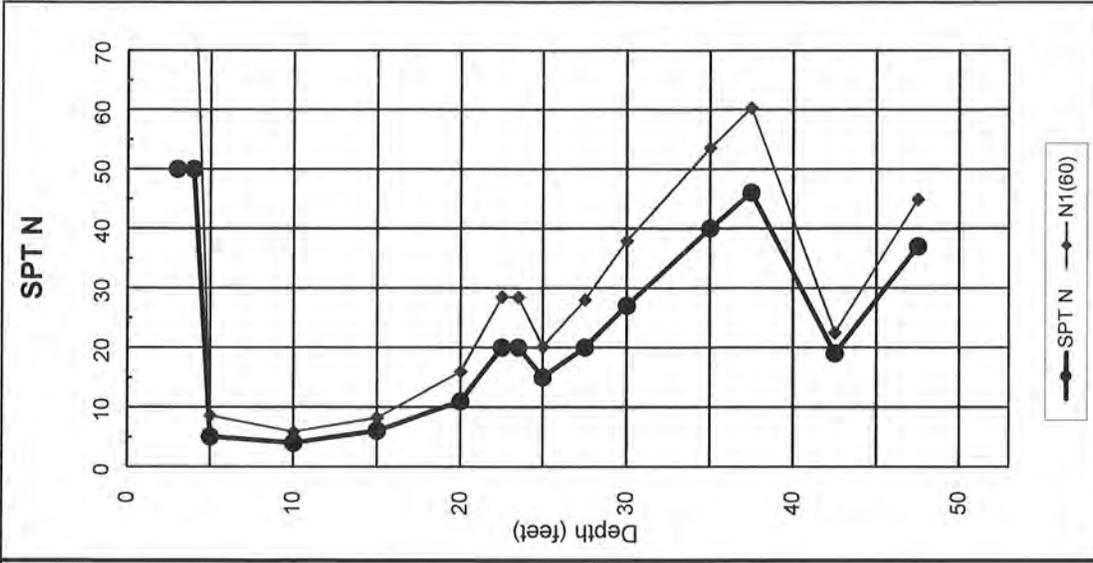
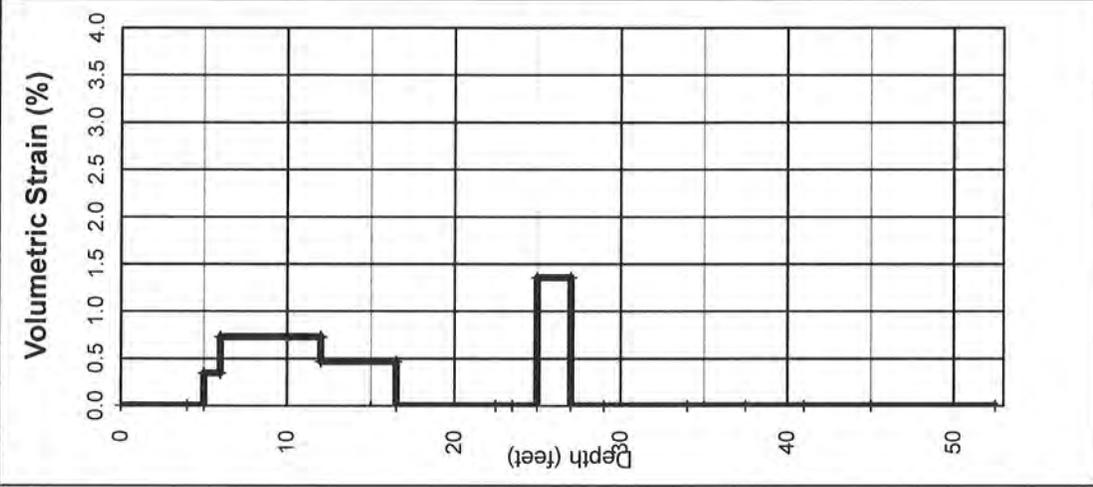
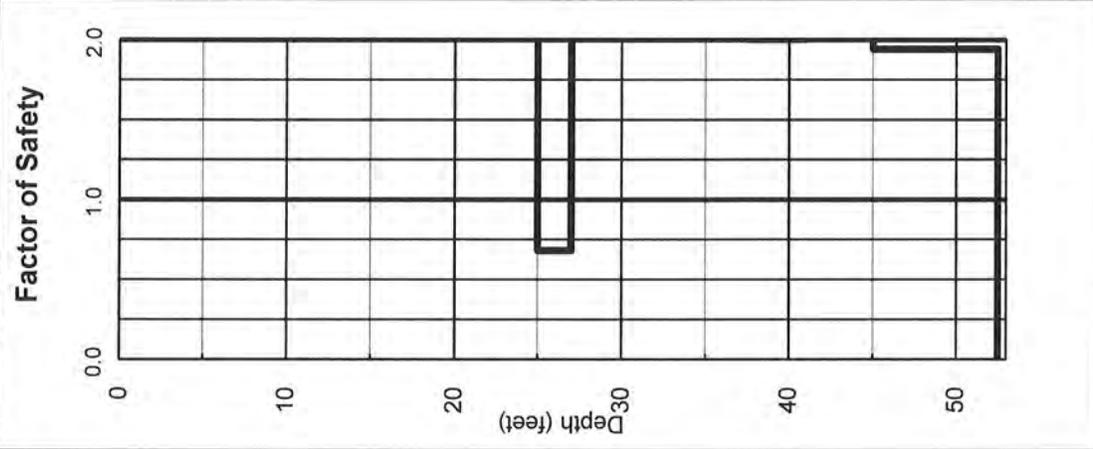
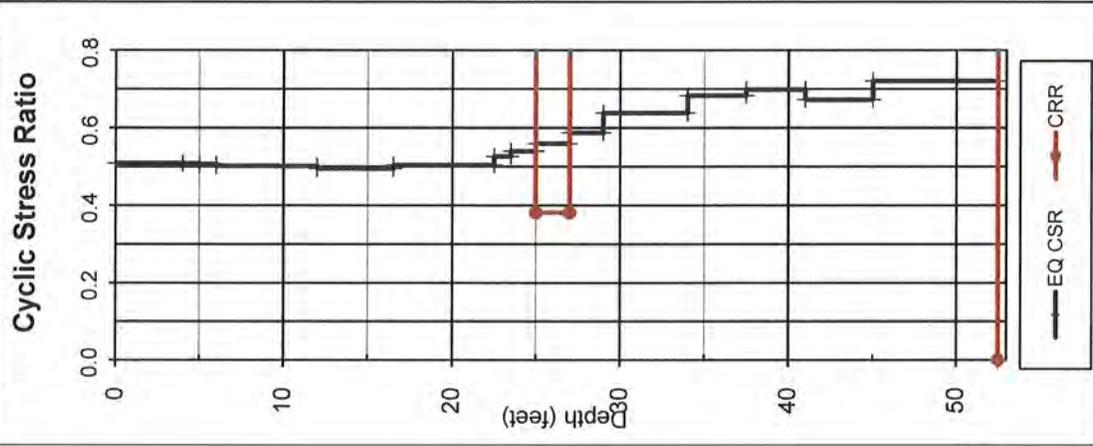
1996/1998 NCEER Method

Ground Compaction Remediated to 5 foot depth
Calc GWT (feet): 23

Boring: B-12

Earthquake Magnitude: 7.2

PGA, g: 0.87



Total Thickness of Liquefiable Layers: 2.0 feet

Estimated Total Ground Subsidence: 1.1 inches

CPT-LIQUEFY.XLS - A SPREADSHEET FOR EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL USING CPT DATA

Developed 2003 by Shelton L. Stringer, GE, Earth Systems Southwest

Project: Doris and Patterson
Job No: VT-24867-10

Date: 9/28/2017

Sounding: CPT-4

EARTHQUAKE INFORMATION:	
Method Used:	1 1998 NCEER (Robertson & Wride)
Averaging Increment:	3 0.15 m
Induced CSR (M=7.5):	= 0.65*PGA*(rho/po)*rd/MSF
Clean Sand Qc1n:	= C ₀ *K _v *K _h *Qc
MSF:	1.11
GWT, feet:	22.5
Calc GWT, feet:	22.5

Plot: 4
1998 NCEER (Robertson & Wride)
Ignore 1st/last increment into sand/silt soils: 1 yes
Ignore/mediate upper: 1.5 m
Unit Weight of unsaturated soils: 115 pcf
Unit Weight of saturated soils: 130 pcf
Limiting lc for liquefiable soils: 2.75
Limiting lc for K_v: 2.8

Use Moss @ P_c: 15%
Use Tokimatsu & Seed (0) or Ishihara & Yoshimine (1): 0
Required SF: 1.30
Max ΔN₍₆₀₎ - post liquefied: 5.5
Max ΔN₍₆₀₎ - non liquefied: 10.0

Depth (feet)	Qc (ksf)	Fs (ksf)	Ratio (Fs/Qc)	RT (%)	qc (MPa)	σ _v (ksf)	p _o (ksf)	σ _v /p _o	F (%)	rd (%)	n	Cq	Q	MPa	MPa	MPa	MPa	K _c	Qc1n	lc	Dr (%)	K _c	K _v	Qc1n	Kg	CSR	CRR	Factor	N ₍₆₀₎ Ratio	N ₍₆₀₎ Equiv. FC Adj	N ₍₆₀₎ Equiv. N ₍₆₀₎	Strain (%)
0.49	0.15	10.27	0.19	1.88	0.98	115	0.028	0.028	1.000	1.89	0.82	1.70	16.45	1.67	1.45	3.13	16.50	2.71	0	0	0	0	1.00	1.00	1.00	1.00	0.341	Non-Liq.	3.7	4.5	0.00	
0.98	0.30	25.77	0.12	0.45	2.47	115	0.057	0.057	1.000	0.46	0.62	1.70	41.31	4.19	0.00	4.19	41.40	2.05	0	0	0	0	1.00	1.00	1.00	1.00	0.341	Non-Liq.	5.0	8.3	0.00	
1.48	0.45	25.87	0.20	0.75	2.48	115	0.085	0.085	0.999	0.76	0.65	1.70	41.43	4.21	0.27	4.48	41.56	2.15	0	0	0	0	1.00	1.00	1.00	1.00	0.340	Non-Liq.	4.8	8.7	0.00	
1.97	0.60	33.37	0.24	0.73	3.20	115	0.113	0.113	0.997	0.73	0.62	1.70	53.43	5.43	0.24	5.67	53.61	2.05	0	0	0	0	1.00	1.00	1.00	1.00	0.340	Non-Liq.	5.0	10.8	0.00	
2.46	0.75	26.80	0.19	0.72	2.57	115	0.141	0.141	0.996	0.72	0.65	1.70	42.84	4.36	0.23	4.59	43.06	2.13	0	0	0	0	1.00	1.00	1.00	1.00	0.340	Non-Liq.	4.8	8.9	0.00	
2.95	0.90	24.30	0.13	0.54	2.33	115	0.170	0.170	0.995	0.55	0.64	1.70	38.77	3.96	0.04	4.00	39.05	2.11	0	0	0	0	1.00	1.00	1.00	1.00	0.339	Non-Liq.	4.8	8.0	0.00	
3.44	1.05	18.80	0.45	2.39	1.80	115	0.198	0.198	0.994	2.42	0.78	1.70	29.89	3.06	1.99	5.05	30.21	2.56	0	0	0	0	1.00	1.00	1.00	1.00	0.339	Non-Liq.	4.0	7.5	0.00	
3.94	1.20	19.40	0.82	4.22	1.86	115	0.226	0.226	0.993	4.27	0.82	1.70	30.81	3.16	3.90	7.06	31.17	2.71	0	0	0	0	1.00	1.00	1.00	1.00	0.338	Non-Liq.	3.7	8.4	0.00	
4.43	1.35	21.17	0.91	4.28	2.03	115	0.255	0.255	0.992	4.33	0.81	1.70	33.60	3.45	3.96	7.40	34.01	2.69	0	0	0	0	1.00	1.00	1.00	1.00	0.338	Non-Liq.	3.7	9.1	0.00	
4.92	1.50	31.77	1.13	3.57	3.04	115	0.283	0.283	0.990	3.60	0.76	1.70	50.59	5.13	3.21	8.34	1.63	51.04	2.50	1	49	2.79	1.00	142.5	1.00	0.349	Non-Liq.	4.1	12.5	10.0	22.5	0.13
5.41	1.65	54.57	1.79	3.28	5.23	115	0.311	0.311	0.989	3.30	0.70	1.70	87.18	7.85	2.91	10.76	1.37	87.68	2.32	1	71	2.00	1.00	175.2	1.00	infin.	Non-Liq.	4.5	19.6	10.0	29.6	0.07
5.91	1.80	52.40	1.75	3.33	5.02	115	0.340	0.340	0.988	3.36	0.71	1.70	83.65	7.35	2.97	10.32	1.40	84.20	2.33	1	70	2.06	1.00	173.3	1.00	infin.	Non-Liq.	4.4	19.0	10.0	29.0	0.07
6.40	1.95	22.07	0.90	4.09	2.11	115	0.368	0.368	0.987	4.16	0.81	1.70	34.87	3.37	3.76	7.13	35.46	2.66	0	0	0	0	1.00	1.00	1.00	1.00	0.336	Non-Liq.	3.8	9.4	0.00	
6.89	2.10	11.90	0.50	4.16	1.14	115	0.396	0.396	0.986	4.30	0.88	1.70	18.48	1.94	3.63	5.76	19.12	2.88	0	0	0	0	1.00	1.00	1.00	1.00	0.336	Non-Liq.	3.4	5.7	0.00	
7.38	2.25	14.00	0.43	3.04	1.34	115	0.424	0.424	0.985	4.33	0.84	1.70	21.81	2.43	2.65	5.08	24.10	2.74	0	0	0	0	1.07	1.00	1.00	1.00	0.336	Non-Liq.	3.6	5.7	0.00	
7.87	2.40	8.27	0.35	4.27	0.79	115	0.453	0.453	0.984	4.52	0.93	1.70	12.56	1.35	3.94	5.29	13.28	3.02	0	0	0	0	1.00	1.00	1.00	1.00	0.335	Non-Liq.	3.1	4.3	0.00	
8.37	2.55	14.20	0.39	2.75	1.36	115	0.481	0.481	0.983	2.84	0.83	1.70	22.04	2.16	2.35	4.51	22.90	2.71	0	0	0	0	1.00	1.00	1.00	1.00	0.335	Non-Liq.	3.7	6.2	0.00	
8.86	2.70	21.90	0.59	2.64	2.10	115	0.509	0.509	0.982	2.70	0.79	1.70	34.37	3.01	2.23	5.24	1.74	35.19	2.54	1	33	3.00	1.00	105.5	1.00	0.189	Non-Liq.	4.0	8.0	10.0	18.8	0.23
9.35	2.85	24.57	0.76	3.09	2.35	115	0.538	0.538	0.981	3.16	0.79	1.70	38.61	3.20	2.70	5.90	1.84	39.47	2.55	1	38	3.03	1.00	119.8	1.00	0.240	Non-Liq.	4.0	9.8	10.0	19.8	0.20
9.84	3.00	23.03	0.80	3.47	2.21	115	0.566	0.566	0.979	3.56	0.81	1.68	35.27	2.93	3.10	6.03	2.06	36.16	2.61	1	35	3.42	1.00	123.5	1.00	0.255	Non-Liq.	3.9	10.0	19.3	0.22	0.22
10.33	3.15	32.80	0.79	2.41	3.14	115	0.594	0.594	0.978	2.46	0.75	1.54	46.82	4.04	2.00	6.03	1.49	47.69	2.42	1	46	2.37	1.00	113.2	1.00	0.215	Non-Liq.	4.3	11.2	10.0	21.2	0.18
11.32	3.30	50.03	0.68	1.36	4.79	115	0.623	0.623	0.977	1.93	0.66	1.42	66.18	6.08	0.89	6.97	1.15	67.01	2.14	1	60	1.52	1.00	102.1	1.00	0.179	Non-Liq.	4.8	13.9	6.5	20.4	0.20
11.83	3.45	65.77	0.61	0.92	6.30	115	0.651	0.651	0.976	0.93	0.60	1.34	82.38	7.91	0.44	8.35	1.06	83.21	1.96	1	69	1.25	1.00	103.8	1.00	0.184	Non-Liq.	5.2	16.1	4.7	20.8	0.19
11.81	3.60	43.60	0.70	1.60	4.18	115	0.679	0.679	0.975	1.62	0.69	1.36	55.08	5.09	1.14	6.23	1.22	55.95	2.24	1	53	1.78	1.00	99.7	1.00	0.172	Non-Liq.	4.6	12.1	7.8	19.9	0.21
12.30	3.75	37.57	0.80	2.13	3.60	115	0.707	0.707	0.974	2.17	0.73	1.34	46.76	4.28	1.69	5.97	1.40	47.65	2.38	1	46	2.23	1.00	106.2	1.00	0.192	Non-Liq.	4.3	11.0	10.0	21.0	0.19
13.29	4.05	40.20	0.99	2.45	3.85	115	0.764	0.764	0.972	2.50	0.74	1.27	47.43	4.39	2.03	6.42	1.16	72.12	2.14	1	63	1.54	1.00	111.1	1.00	0.208	Non-Liq.	4.8	15.0	7.2	22.2	0.17
13.78	4.20	14.63	0.82	5.60	1.40	115	0.792	0.792	0.971	5.92	0.92	1.30	17.06	1.62	4.88	6.30	18.04	3.00	0	0	0	0	1.00	1.00	1.00	1.00	0.331	Non-Liq.	3.1	5.8	0.00	0.00
14.27	4.35	14.37	0.61	4.22	1.38	115	0.821	0.821	0.970	4.48	0.90	1.26	16.09	1.57	3.87	5.44	17.06	2.94	0	0	0	0	1.00	1.00	1.00	1.00	0.331	Non-Liq.	3.3	5.2	0.00	0.00
14.76	4.50	12.43	0.54	4.30	1.19	115	0.849	0.849	0.969	4.62	0.92	1.22	13.41	1.35	3.95	5.30	14.39	3.01	0	0	0	0	1.00	1.00	1.00	1.00	0.330	Non-Liq.	3.1	4.6	0.00	0.00
15.26	4.65	17.77	0.50	2.80	1.70	115	0.877	0.877	0.968	2.95	0.85	1.17	18.71	1.88	2.39	4.27	19.68	2.77	0	0	0	0	1.00	1.00	1.00	1.00	0.330	Non-Liq.	3.6	5.5	0.00	0.00
15.75	4.80	14.23	0.56	3.91	1.36	115	0.906	0.906	0.967	4.18	0.90	1.15	14.49	1.48	3.54	5.02	15.48	2.95	0	0	0	0	1.00	1.00	1.00	1.00	0.330	Non-Liq.	3.2	4.8	0.00	0.00
16.24	4.95	41.03	0.55	1.34	3.93	115	0.934	0.934	0.966	1.38	0.70	1.09	41.36	5.87	0.88	6.74	59.55	2.30	0	0	0	0	1.41	1.00	1.00	1.00	0.329	Non-Liq.	4.5	4.8	0.00	0.00
17.22	5.25	20.97	0.45	2.16	2.01	115	0.962	0.962	0.965	2.27	0.81	1.08	20.43	2.97	1.72	4.69	30.12	2.67	0	0	0	0	1.41	1.00	1.00	1.00	0.329	Non-Liq.	3.8	8.0	0.00	0.00
17.72	5.40	7.53	0.22	2.85	0.72	115	1.019	1.019	0.962	3.30	0.96	1.04	6.39	0.74	2.44	3.18	7.39	3.18	0	0	0	0	1.00	1.00	1.00	1.00	0.328	Non-Liq.	2.9	3.4	0.00	0.00
18.21	5.55	8.30	0.15	1.81	0.79	115	1.047	1.047	0.961	2.07	0.92	1.01	6.92	0.80	1.35	2.16	7.92	3.05	0	0	0	0	1.00	1.00	1.00	1.00	0.328	Non-Liq.	3.0	2.6	0.00	0.00
18.70	5.70	8.50	0.15	1.75	0.81	115	1.075	1.075	0.960	2.00	0.92	0.99	6.91	0.80	1.29	2.09	7.92	3.04	0	0	0	0	1.00	1.00	1.00	1.00	0.327	Non-Liq.	3.1	2.6	0.00	0.00
19.19	5.85	9.80	0.14	1.43	0.94	115	1.104	1.104	0.959	1.61	0.89	0.96	7.92	0.91	0.96	1.87	8.92	2.94	0	0	0	0	1.00	0.99	1.00	1.00	0.327	Non-Liq.	3.2	2.8	0.00	0.00
19.69	6.00	20.70	0.43	2.09	1.98	130	1.136	1.136	0.958	2.21	0.82	0.94	17.45	1.92	1.64	3.56	18.53	2.72	0	0	0	0	1.00	0.99	1.00	1.00	0.326	Non-Liq.	3.7	5.0	0.00	0.00

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

Method Used: 1 1998 NCEER (Robertson & Wride)

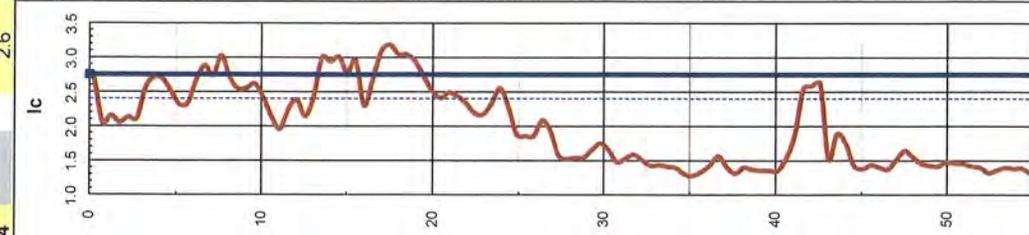
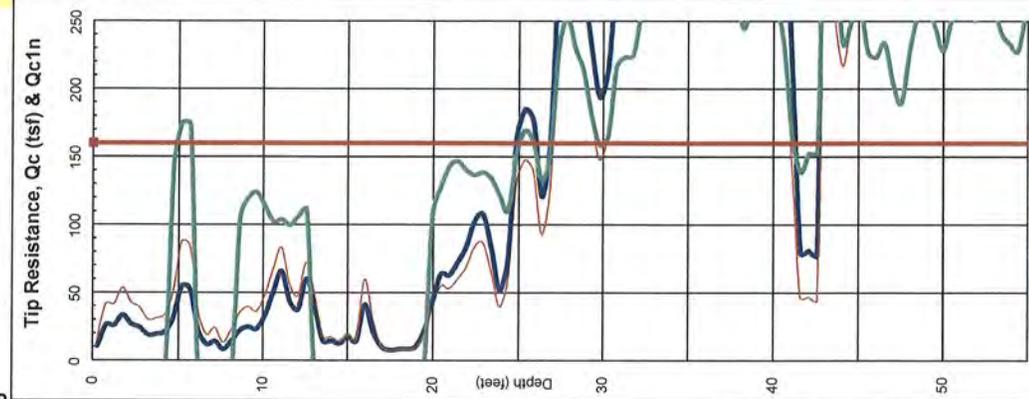
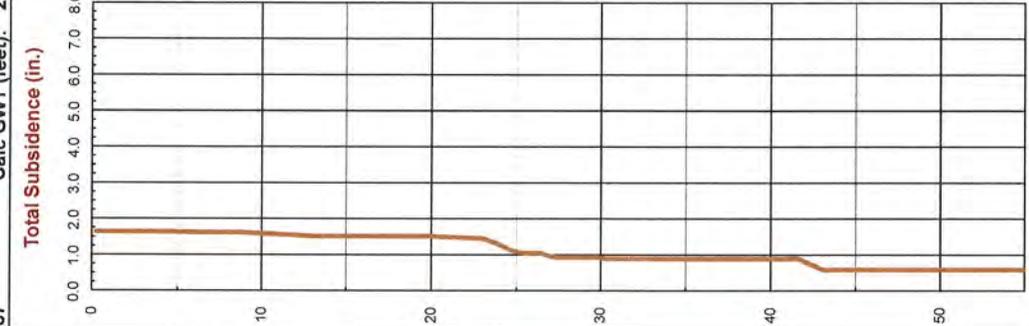
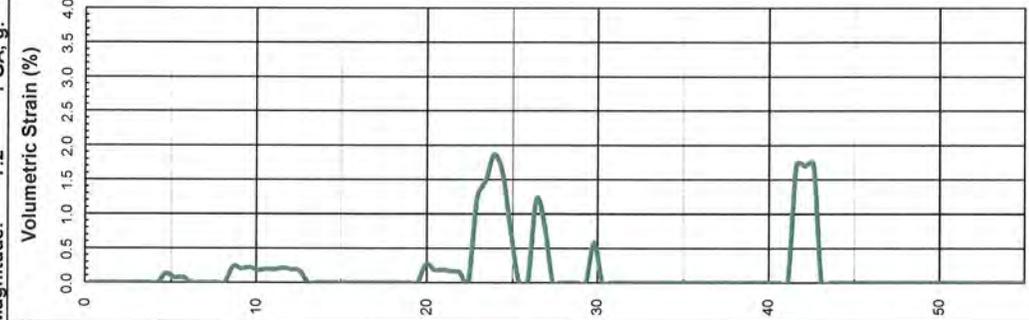
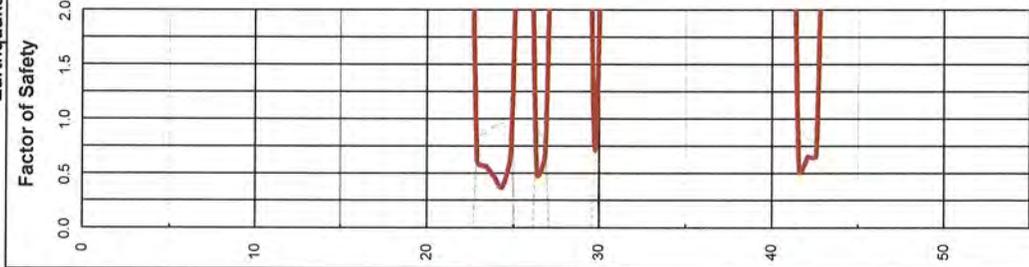
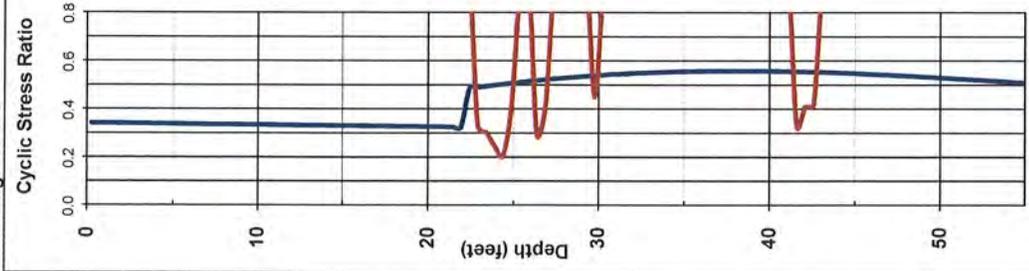
Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1n/N1(60)$ ratio = 5

Earthquake Magnitude: 7.2 PGA, g: 0.87

Calc GWT (feet): 22.5

Plot 4 Limiting Ic: 2.6

Sounding: CPT-4



EQ CSR CRR

FS Prob.

Qc (field)
Qc1n
Qc1n - clean sand
Dense Qc1n Boundary

Total Thickness of Liquefiable Layers: 8.4 feet

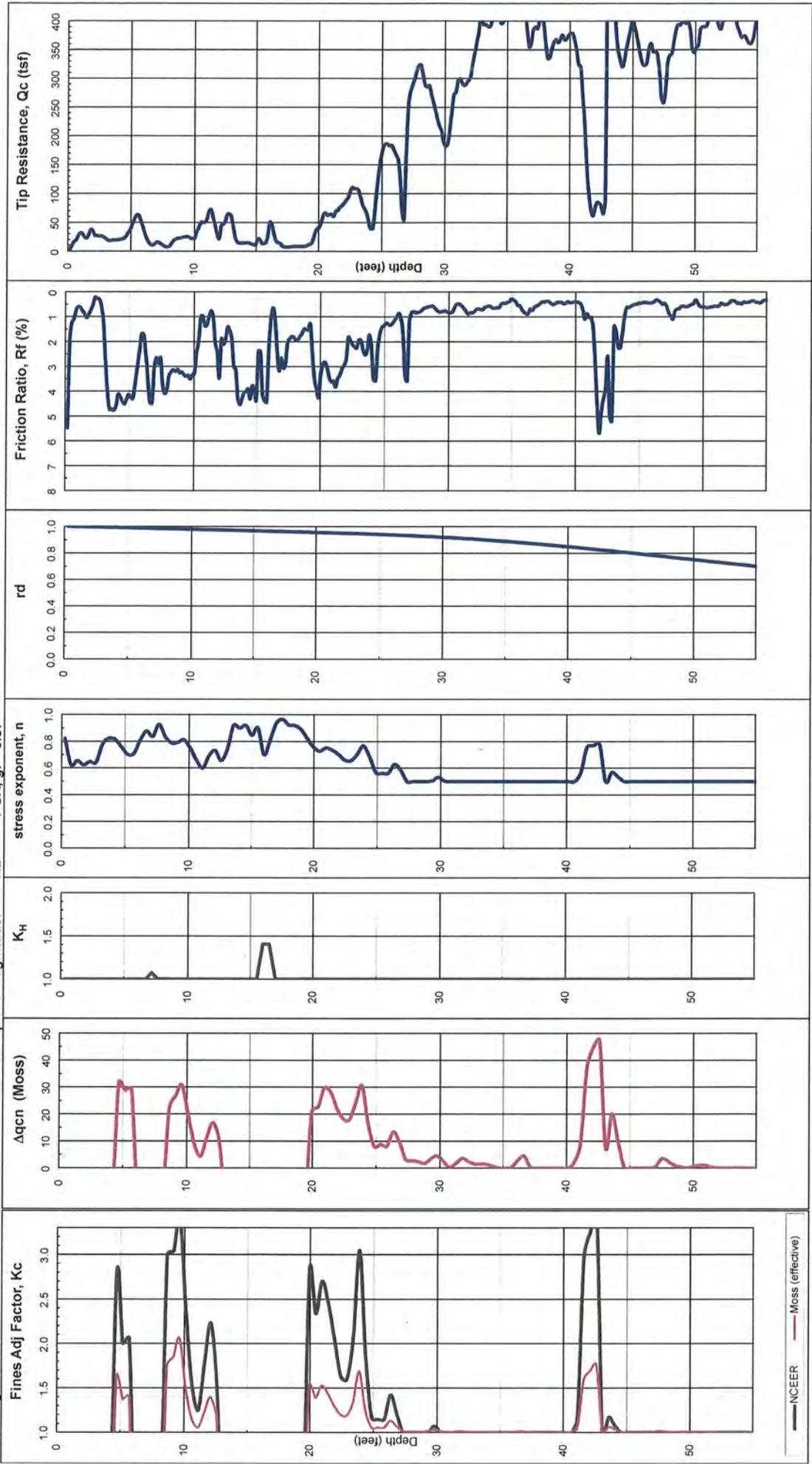
Estimated Total Ground Subsidence (Settlement): 1.6 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

3 avg increment = 0.15m Qc1n/N1(60): 5
 ignore 1st/last increment into sand/silt soils: 0
 Sounding: CPT-4

Earthquake Magnitude: 7.2 PGA, g: 0.87



LIQUEFY-v.2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE
 Developed 2008 by Shelton L. Stringer, PE, GE, PG - Earth Systems Southwest

Project: Doris & Patterson K-a School
 Job No: VT-24867-10
 Date: 9/29/2017
 Boring: B-15
 Data Set: 1

Methods: Liquefaction Analysis using 1986 & 1988 NCEER workshop method (Youd & Idriss, editors)
 Journal of Geotechnical and Environmental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
 Settlement Analysis from Tokimatsu and Seed (1987), JGEE, Vol 113, No 8, ASCE
 Modified by Pradell, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:
 SPT N VALUE CORRECTIONS:
 Magnitude: 7.2
 Energy Correction to N60 (C_e): 1.33
 Drive Rod Corr. (C_d): 1
 Borehole Dia. Corr. (C_b): 1.00
 Rod Length above ground (feet): 3.0
 Sampler Liner Correction for SPT: 1
 Calc GWT: 22.5 feet
 Remediate to: 5.0 feet

Automatic Hammer
 Default
 Yes

Total (ft) Liquefied Thickness: 0
 Required SF: 1.30
 Minimum Calculated SF: 1.34

Total (in.) Induced Subsidence: 0.3

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Base Cal	Liquef. Suscept. (0 or 1)	Depth Mod (feet)	Total Unit Wt. (pcf)	Fines Content (%)	Rod Length (feet)	Depth (feet)	Tot. Stress Eff. Stress at SPT (psf)	at SPT (psf)	p _o (psf)	rd	C _u	C _r	C _s	N ₍₁₀₎	Rel. Dens. (%)	FC Adj. ΔN ₍₁₀₎	Trigger Equiv. Sand	K _σ	N _(req)	N _(reconst)	Safety Factor	FC Adj. ΔN _(req)	Post. Strain (%)	Volume Strain (%)	Induced Subsidence (in.)	P (tsf)	C _{u, max} (tsf)	T _{av} (tsf)	I _{av} /G _{max}	a	b	Shear Strain γ	E ₁₀	Strain E ₁₀	E ₁₀	Strain E ₁₀	Dry Sand Subsidence (in.)
5.0	1	122	122	50	3.0	6.0	0.183	0.183	0.99	1.70	0.75	1.30	110.5	100	10.0	120.5	1.00	1.400	0.509	Non-Liq.	10.0	120.5	0.00	0.00	0.123	773	0.069	0.0001	0.129	22.546	1.5E-04	1.8E-05	1.7E-05	0.00			
6.0	1	122	122	28	5.0	8.0	0.305	0.305	0.99	1.70	0.75	1.22	22.9	57	7.7	30.6	1.00	1.400	0.506	Non-Liq.	7.7	30.6	0.06	0.01	0.204	632	0.114	0.0002	0.132	16.594	5.8E-04	3.5E-04	3.2E-04	0.01			
7.0	1	122	122	28	6.0	9.0	0.366	0.366	0.99	1.70	0.75	1.22	22.9	57	7.7	30.6	1.00	1.400	0.505	Non-Liq.	7.7	30.6	0.07	0.01	0.245	693	0.137	0.0002	0.134	14.875	6.1E-04	3.7E-04	3.4E-04	0.01			
10.0	5	122	122	66	7.5	10.5	0.458	0.458	0.98	1.00	0.75	1.10	5.5	36	5.8	15.0	1.00	Inf.	0.503	Non-Liq.	5.5	15.0	0.00	0.00	0.307	937	0.393	0.0004	0.136	13.011	1.8E-03	2.3E-03	2.3E-03	0.11			
12.0	7	125	125	28	17.5	20.5	1.079	1.079	0.96	0.99	0.90	1.10	9.2	57	9.5	32.1	1.00	1.400	0.494	Non-Liq.	5.8	15.0	0.47	0.11	0.723	937	0.393	0.0004	0.152	7.776	1.8E-03	2.6E-03	2.3E-03	0.11			
18.0	15	125	125	50	15.0	18.0	0.923	0.923	0.97	1.07	0.86	1.22	22.8	57	9.5	32.1	1.00	1.400	0.495	Non-Liq.	9.5	32.1	0.08	0.06	0.618	1,117	0.338	0.0003	0.148	8.542	7.8E-04	4.4E-04	4.1E-04	0.05			
22.5	13	125	125	50	20.0	23.0	1.235	1.235	0.96	0.93	0.93	1.18	17.7	50	8.5	26.2	0.95	0.304	0.513	Non-Liq.	8.5	26.2	0.14	0.07	0.827	1,208	0.447	0.0004	0.156	7.170	1.0E-03	7.5E-04	6.9E-04	0.07			
25.0	13	125	125	50	22.5	25.5	1.391	1.391	0.95	0.87	0.96	1.17	17.0	49	8.4	25.5	0.95	0.290	0.513	Non-Liq.	8.4	25.5	0.00	0.00	0.932	1,289	0.500	0.0004	0.160	6.676	1.1E-03	7.5E-04	6.9E-04	0.07			
30.0	27	125	125	5	25.0	28.0	1.548	1.548	0.94	0.85	0.98	1.30	39.1	75	0.0	39.1	0.88	1.400	0.578	Non-Liq.	2.42	0.0	0.00	0.00	1.037	1,544	0.551	0.0004	0.164	6.263	7.8E-04	4.4E-04	4.1E-04	0.05			
35.0	35	125	125	5	30.0	33.0	1.660	1.660	0.92	0.81	1.00	1.30	46.9	84	0.0	46.9	0.84	1.400	0.639	Non-Liq.	2.19	0.0	0.00	0.00	1.246	1,825	0.648	0.0004	0.172	5.608	6.8E-04	4.4E-04	4.1E-04	0.05			
40.0	55	125	125	5	35.0	38.0	2.173	2.173	0.89	0.77	1.00	1.30	73.4	100	0.0	73.4	0.81	1.400	0.684	Non-Liq.	2.05	0.0	0.00	0.00	1.456	2,259	0.732	0.0003	0.181	5.109	5.9E-04	4.4E-04	4.1E-04	0.05			
45.0	41	125	125	5	40.0	43.0	2.485	2.485	0.85	0.74	1.00	1.30	52.5	87	0.0	52.5	0.78	1.400	0.711	Non-Liq.	1.97	0.0	0.00	0.00	1.665	2,160	0.800	0.0004	0.189	4.713	6.5E-04	4.4E-04	4.1E-04	0.05			
50.0	40	125	125	5	45.0	48.0	2.798	2.798	0.80	0.71	1.00	1.30	49.3	84	0.0	49.3	0.76	1.400	0.721	Non-Liq.	1.94	0.0	0.00	0.00	1.874	2,243	0.850	0.0004	0.197	4.390	6.5E-04	4.4E-04	4.1E-04	0.05			

NC = 12.5

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Doris & Patterson K-8 School

Project No: VT-24867-10

1996/1998 NCEER Method

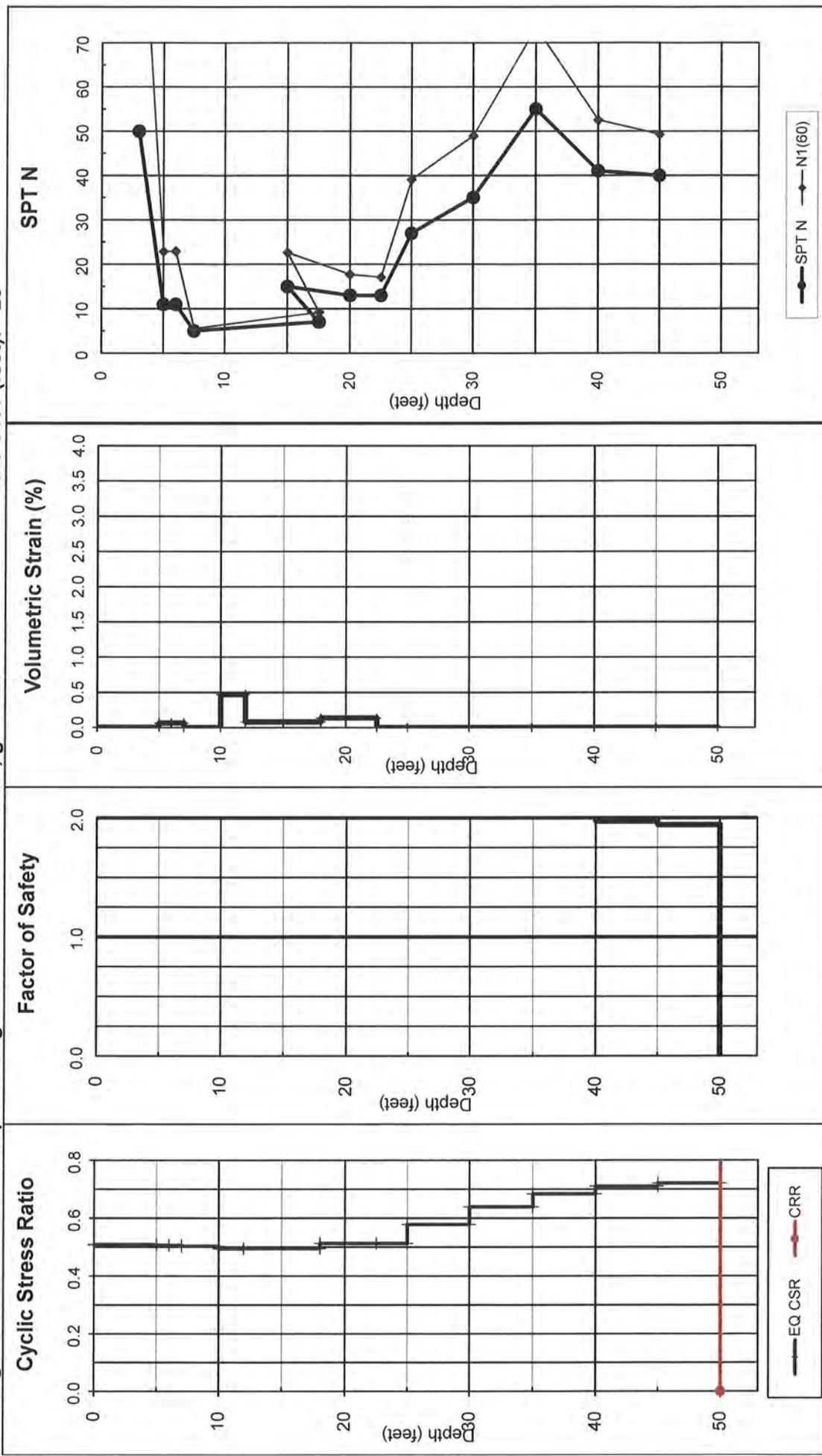
Ground Compaction Remediated to 5 foot depth

Boring: B-15

Earthquake Magnitude: 7.2

PGA, g: 0.87

Calc GWT (feet): 23



Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.3 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

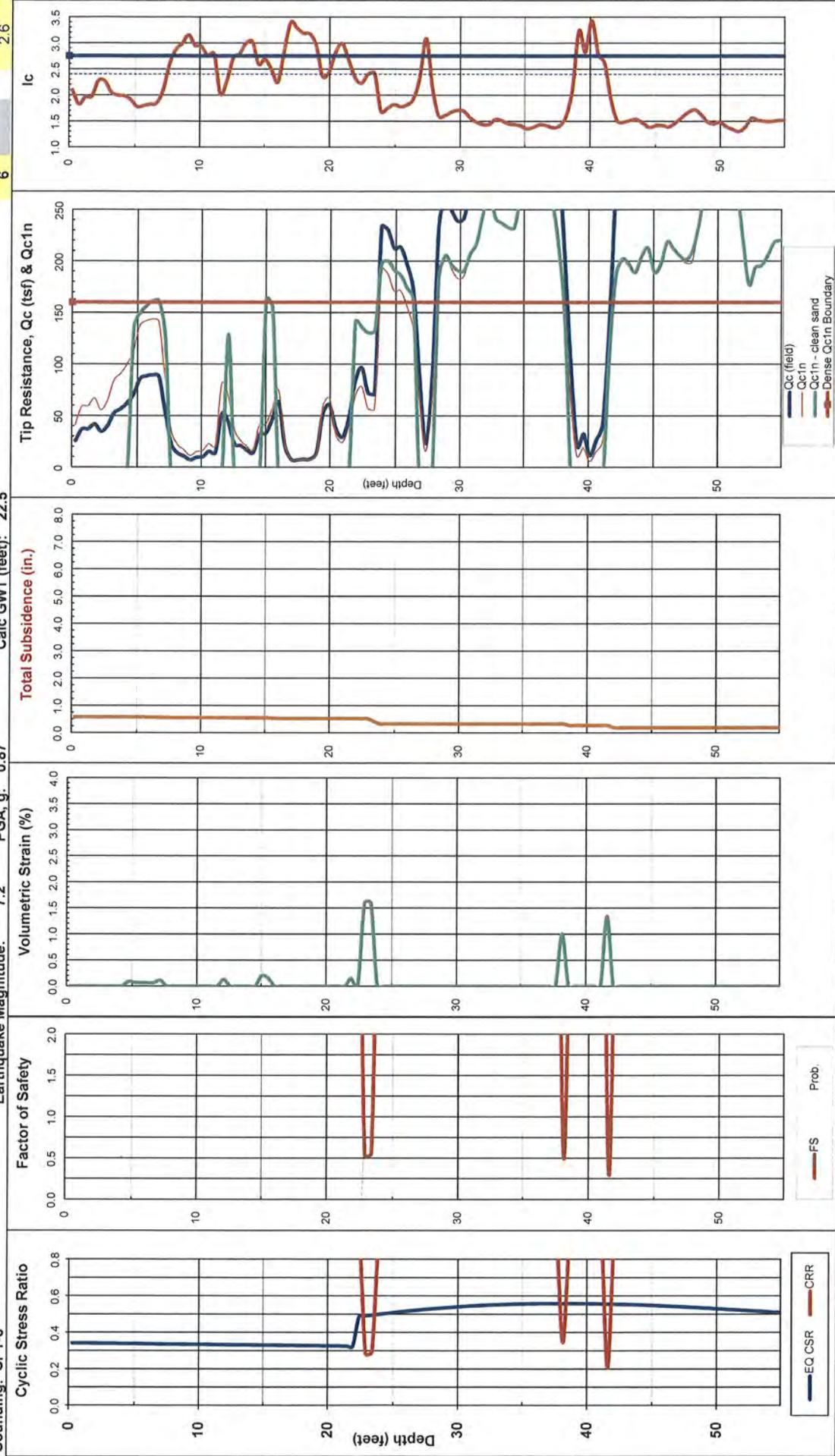
Method Used: 1 1998 NCEER (Robertson & Wride)

Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1r/N1(60)$ ratio = 5

Earthquake Magnitude: 7.2 PGA, g: 0.87

Calc GWT (feet): 22.5

Sounding: CPT-6 Plot 6 Limiting Ic: 2.6



Total Thickness of Liquefiable Layers: 3.0 feet

Estimated Total Ground Subsidence (Settlement): 0.6 inches

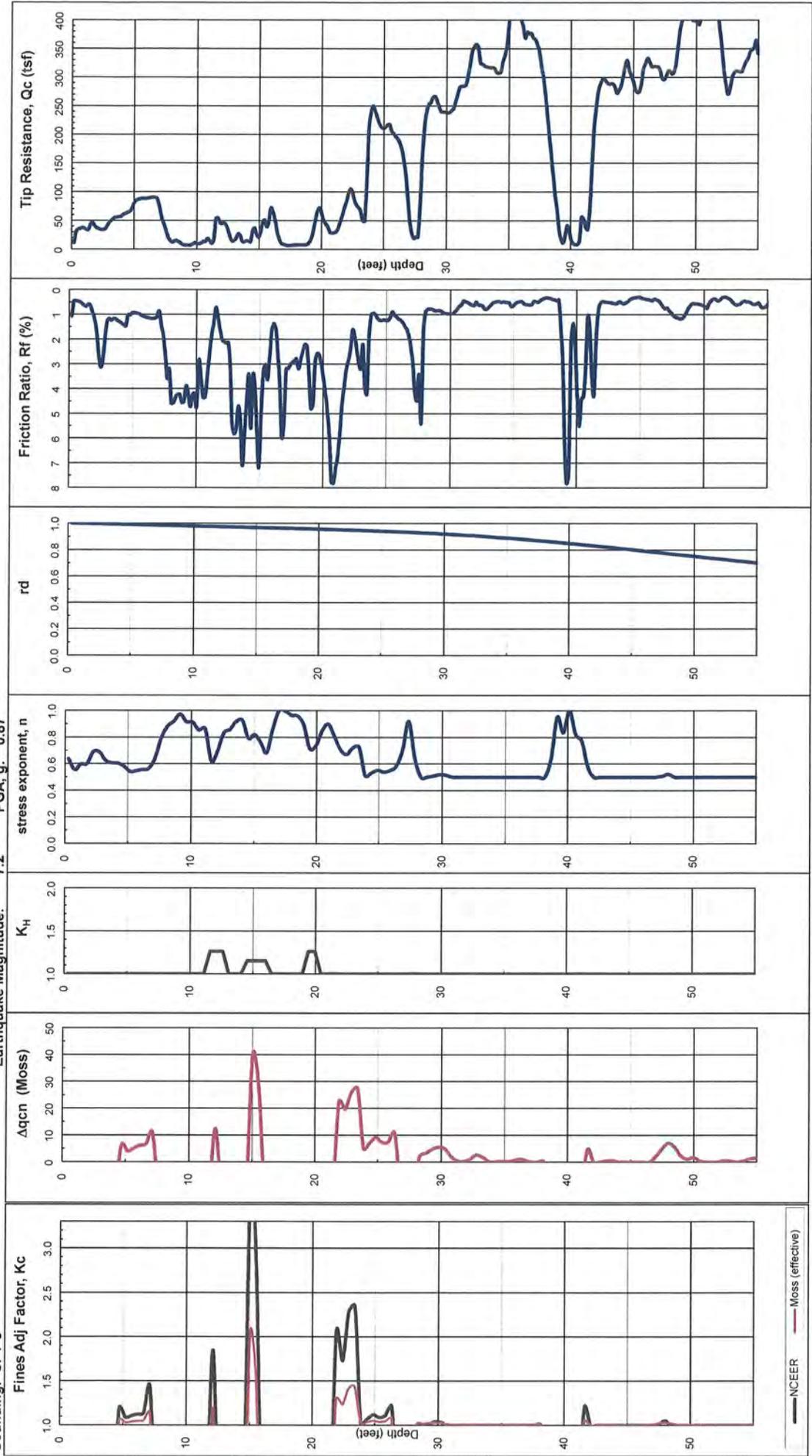
EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Method Used: 1998 NCEER (Robertson & Wride)

3 avg increment = 0.15m Qc1n/N1(60): 5
 ignore 1st/last increment into sand/silt soils: 0

Sounding: CPT-6

Earthquake Magnitude: 7.2 PGA, g: 0.87



CPT-LIQUEFY.XLS - A SPREADSHEET FOR EMPIRICAL ESTIMATION OF LIQUEFACTION POTENTIAL USING CPT DATA

Developed 2003 by Shelton L. Stinger, GE, Earth Systems Southwest

Project: Doris and Patterson
 Job No: VT-24867-10
 Date: 9/28/2017
 Sounding: CPT-10

Liquefaction Analysis using 1998 NCEER (Robertson & Wride) method
 Settlement Analysis using Tokimatsu & Seed (1987), clean sand $q_{c1}/N(160)$ ratio = 5

EARTHQUAKE INFORMATION:	
Magnitude:	7.2
PGA, g:	0.87
MSF:	1.11
GWT, feet:	22.5
Calc GWT, feet:	22.5

Plot: 10
 Method Used: 1
 Averaging Increment: 3
 Induced CSR (M=7.5) = $0.65 \cdot PGA \cdot (pa/po)^{0.5} \cdot dMSF$
 Clean Sand $q_{c1n} = C_a \cdot K_c \cdot K_r \cdot Q_c$
 SF = $CSR_{7.5} / K_r / CSR$

1998 NCEER (Robertson & Wride)
 Ignore 1s/last increment into sand/silt soils: 1 yes
 Ignore/remediate upper: 1.5 m
 Unit Weight of unsaturated soils: 115 pcf
 Unit Weight of saturated soils: 130 pcf
 Limiting ic for liquefiable soils: 2.75
 Limiting ic for K_{r1} : 2.8

Use Moss @ P_c: 15%
 Use Tokimatsu & Seed (0) or Ishihara & Yoshimine (1): 0
 Required SF: 1.30
 Min SF of Liquefiable Layers: 0.23
 Avg SF of Liquefiable Layers: 0.37

Total Liquefied Thickness (feet)	3.4
Total Induced Subsidence (inches)	5.5
	10.0
	0.8

Depth (feet)	Friction		Total Stress (psf)	Unit Wt. (pcf)	Eff. Stress (psf)	F %	n	C _q	Q	MPa	MPa	MPa	K _c	Q _{c1n}	K _{r1}	Clean Sand	C _{RR}	CSR	M=7.5	Safety Factor	N ₍₁₆₀₎ Ratio	N ₍₁₆₀₎ Equiv.	FC Adj.	N ₍₁₆₀₎ Equiv.	N ₍₁₆₀₎ Ratio	N ₍₁₆₀₎ Equiv.	Strain (%)	Volumetric Strain (%)
	Q _c (tsf)	F _s (tsf)																										
0.49	0.15	21.67	0.14	0.65	0.028	0.028	1.000	0.65	0.66	1.70	34.77	3.53	0.15	3.68	34.81	2.19	1.00	1.00	1.00	1.00	0.341	Non-Liq.	4.7	7.4	Non-Liq.	4.7	0.00	
0.98	0.30	49.80	0.15	0.29	4.77	115	0.057	0.057	0.72	1.70	79.93	8.11	0.00	8.11	80.02	1.71	1.00	1.00	1.00	1.00	0.341	Non-Liq.	5.6	14.2	Non-Liq.	5.6	0.00	
1.48	0.45	52.70	0.38	0.72	5.05	115	0.085	0.085	0.72	1.70	84.54	8.58	0.23	8.81	84.68	1.88	1.00	1.00	1.00	1.00	0.340	Non-Liq.	5.3	15.9	Non-Liq.	5.3	0.00	
1.97	0.60	44.87	0.43	0.96	4.30	115	0.113	0.113	0.96	0.61	71.91	7.30	0.48	7.79	72.09	2.01	1.00	1.00	1.00	1.00	0.340	Non-Liq.	5.1	14.2	Non-Liq.	5.1	0.00	
2.46	0.75	36.43	0.39	1.08	3.49	115	0.141	0.141	0.96	1.08	64.17	5.83	0.61	6.54	58.54	2.12	1.00	1.00	1.00	1.00	0.340	Non-Liq.	4.9	12.1	Non-Liq.	4.9	0.00	
2.95	0.90	37.80	0.38	1.00	3.62	115	0.170	0.170	0.95	1.01	63.17	6.15	0.53	6.68	60.74	2.08	1.00	1.00	1.00	1.00	0.339	Non-Liq.	4.9	12.4	Non-Liq.	4.9	0.00	
3.44	1.05	79.40	0.99	1.25	7.60	115	0.198	0.198	0.98	1.25	127.26	12.93	0.78	13.71	127.58	1.90	1.00	1.00	1.00	1.00	0.339	Non-Liq.	5.3	24.1	Non-Liq.	5.3	0.00	
3.94	1.20	68.93	1.55	2.25	6.60	115	0.226	0.226	0.99	2.26	110.40	11.22	1.14	13.06	110.76	2.12	1.00	1.00	1.00	1.00	0.338	Non-Liq.	4.8	22.9	Non-Liq.	4.8	0.00	
4.43	1.35	29.43	0.99	3.36	2.82	115	0.255	0.255	0.99	3.39	76.17	10.40	3.00	7.79	47.29	2.51	1.00	1.00	1.00	1.00	0.338	Non-Liq.	4.1	11.6	Non-Liq.	4.1	0.00	
4.92	1.50	15.50	0.35	2.28	1.48	115	0.283	0.283	0.98	2.32	0.79	24.45	2.52	1.86	4.39	1.74	24.91	2.62	1.00	1.00	0.338	Non-Liq.	3.9	6.4	Non-Liq.	3.9	16.4	
5.41	1.65	20.87	0.27	1.28	2.00	115	0.311	0.311	0.98	1.30	0.72	33.03	3.40	0.81	4.21	1.24	33.53	2.36	1.00	1.00	0.337	Non-Liq.	4.4	7.7	Non-Liq.	4.4	10.0	
5.91	1.80	25.70	0.31	1.19	2.46	115	0.340	0.340	0.98	1.20	0.69	40.75	4.18	0.72	4.90	1.17	41.29	2.27	1.00	1.00	0.337	Non-Liq.	4.6	9.1	Non-Liq.	4.6	6.2	
6.40	1.95	28.93	0.41	1.40	2.77	115	0.368	0.368	0.98	1.42	0.69	45.90	4.71	0.94	5.65	1.20	46.49	2.27	1.00	1.00	0.336	Non-Liq.	4.6	10.2	Non-Liq.	4.6	7.0	
6.89	2.10	32.67	0.51	1.56	3.13	115	0.396	0.396	0.98	1.58	0.69	51.85	5.07	1.10	6.18	1.22	52.49	2.26	1.00	1.00	0.336	Non-Liq.	4.6	11.5	Non-Liq.	4.6	19.1	
7.38	2.25	48.23	0.52	1.07	4.62	115	0.424	0.424	0.98	1.08	0.62	70.82	7.21	0.60	7.81	1.08	77.50	2.26	1.00	1.00	0.335	Non-Liq.	5.0	15.4	Non-Liq.	5.0	20.6	
7.87	2.40	48.17	0.56	1.16	4.61	115	0.453	0.453	0.98	1.17	0.63	76.87	6.91	0.69	7.60	1.10	77.39	2.04	1.00	1.00	0.335	Non-Liq.	5.0	15.5	Non-Liq.	5.0	21.0	
8.37	2.55	22.77	0.77	3.38	2.18	115	0.481	0.481	0.98	3.45	0.80	1.70	35.81	3.13	3.01	6.14	1.96	36.58	2.60	1.00	1.00	0.335	Non-Liq.	3.9	9.4	Non-Liq.	3.9	10.0
8.86	2.70	23.63	0.91	3.86	2.26	115	0.509	0.509	0.98	3.95	0.81	1.70	37.16	3.11	3.51	6.63	2.13	37.97	2.63	1.00	1.00	0.335	Non-Liq.	3.9	9.9	Non-Liq.	3.9	10.0
9.35	2.85	23.30	0.87	3.73	2.23	115	0.538	0.538	0.98	3.82	0.81	1.70	36.57	3.01	3.37	6.39	2.13	37.44	2.62	1.00	1.00	0.334	Non-Liq.	3.9	9.7	Non-Liq.	3.9	10.0
9.84	3.00	10.27	0.72	5.96	0.98	115	0.566	0.566	0.97	7.37	0.96	1.70	15.59	1.40	4.69	6.10	16.50	3.09	1.00	1.00	0.334	Non-Liq.	3.0	5.6	Non-Liq.	3.0	0.00	
10.33	3.15	9.20	0.45	4.84	0.88	115	0.594	0.594	0.97	5.17	0.94	1.70	13.83	1.28	4.52	5.80	14.78	3.03	1.00	1.00	0.334	Non-Liq.	3.1	4.8	Non-Liq.	3.1	0.00	
10.83	3.30	12.57	0.33	2.59	1.20	115	0.623	0.623	0.97	7.72	0.86	1.58	17.80	1.67	2.17	3.85	18.73	2.77	1.00	1.00	0.333	Non-Liq.	3.6	5.2	Non-Liq.	3.6	0.00	
11.32	3.45	11.77	0.34	2.86	1.13	115	0.651	0.651	0.97	6.03	0.88	1.53	16.09	1.53	2.46	3.99	17.03	2.83	1.00	1.00	0.333	Non-Liq.	3.5	4.9	Non-Liq.	3.5	0.00	
11.81	3.60	16.90	0.43	2.53	1.62	115	0.679	0.679	0.97	5.24	0.83	1.44	22.14	2.61	2.12	4.73	29.16	2.69	1.00	1.00	0.332	Non-Liq.	3.7	7.8	Non-Liq.	3.7	0.00	
12.30	3.75	20.43	0.67	3.25	1.96	115	0.707	0.707	0.97	3.72	0.83	1.40	26.04	3.00	2.87	5.87	1.95	34.11	2.70	1.00	1.00	0.332	Non-Liq.	3.7	9.2	Non-Liq.	3.7	0.24
12.80	3.90	21.87	0.79	3.60	2.09	115	0.736	0.736	0.97	3.72	0.83	1.35	27.04	3.13	3.22	6.35	35.38	2.71	1.00	1.00	0.332	Non-Liq.	3.7	9.6	Non-Liq.	3.7	0.00	
13.29	4.05	12.97	0.68	5.22	1.24	115	0.764	0.764	0.97	5.55	0.92	1.35	15.58	1.48	4.68	6.16	16.56	3.01	1.00	1.00	0.331	Non-Liq.	3.1	5.3	Non-Liq.	3.1	0.00	
13.78	4.20	10.40	0.56	5.35	1.00	115	0.792	0.792	0.97	5.79	0.95	1.32	11.96	1.18	4.68	5.86	12.95	3.11	1.00	1.00	0.331	Non-Liq.	2.9	4.4	Non-Liq.	2.9	0.00	
14.27	4.35	12.43	0.57	4.56	1.19	115	0.821	0.821	0.97	4.88	0.92	1.26	13.87	1.37	4.22	5.59	14.85	3.01	1.00	1.00	0.331	Non-Liq.	3.1	4.8	Non-Liq.	3.1	0.00	
14.76	4.50	12.30	0.55	5.24	1.18	115	0.849	0.849	0.96	5.93	0.94	1.23	13.30	1.33	4.68	6.00	14.29	3.06	1.00	1.00	0.330	Non-Liq.	3.0	4.8	Non-Liq.	3.0	0.00	
15.26	4.65	13.03	0.70	5.36	1.25	115	0.877	0.877	0.96	5.74	0.93	1.19	13.69	1.38	4.67	6.03	14.68	3.06	1.00	1.00	0.330	Non-Liq.	3.0	4.9	Non-Liq.	3.0	0.00	
15.75	4.80	12.87	0.62	4.82	1.23	115	0.906	0.906	0.96	5.18	0.93	1.16	13.06	1.34	4.48	5.82	14.05	3.05	1.00	1.00	0.330	Non-Liq.	3.0	4.6	Non-Liq.	3.0	0.00	
16.24	4.95	39.57	0.63	1.58	3.79	115	0.934	0.934	0.96	1.62	0.72	1.09	39.93	5.65	1.12	6.77	57.54	2.35	1.00	1.00	0.329	Non-Liq.	4.4	13.1	Non-Liq.	4.4	0.00	
16.73	5.10	50.47	0.90	1.78	4.83	115	0.962	0.962	0.96	1.81	0.70	1.07	50.02	7.07	1.33	8.40	71.74	2.31	1.00	1.00	0.329	Non-Liq.	4.4	16.0	Non-Liq.	4.4	0.00	
17.22	5.25	12.93	0.79	6.10	1.24	115	0.990	0.990	0.96	4.60	0.95	1.06	12.02	1.28	4.67	5.95	13.02	3.14	1.00	1.00	0.328	Non-Liq.	2.9	4.6	Non-Liq.	2.9	0.00	
17.72	5.40	11.53	0.46	3.99	1.10	115	1.019	1.019	0.96	4.37	0.93	1.04	10.30	1.13	3.62	4.75	11.29	3.08	1.00	1.00	0.328	Non-Liq.	2.9	4.6	Non-Liq.	2.9	0.00	
18.21	5.55	10.57	0.45	4.38	1.01	115	1.047	1.047	0.96	4.80	0.95	1.01	9.09	1.02	4.02	5.04	10.09	3.15	1.00	1.00	0.328	Non-Liq.	2.8	3.6	Non-Liq.	2.8	0.00	
18.70	5.70	8.43	0.35	4.19	0.81	115	1.075	1.075	0.96	4.80	0.98	0.98	6.84	0.80	3.82	4.62	7.85	3.25	1.00	1.00	0.327	Non-Liq.	2.8	3.0	Non-Liq.	2.8	0.00	
19.19	5.85	10.77	0.27	2.46	1.03	115	1.104	1.104	0.96	2.74	0.91	0.96	8.79	1.00	2.03	3.03	9.79	3.02	1.00	1.00	0.327	Non-Liq.	3.1	3.2	Non-Liq.	3.1	0.00	
19.69	6.00	34.00	0.44	1.30	3.26	130	1.136	1.136	0.95	1.34	0.95	29.50	3.15	0.83	3.98	30.63	2.41	1.00	1.00	0.326	Non-Liq.	4.3	7.2	Non-Liq.	4.3	0.00		
20.18	6.15	73.23	0.66	0.90	7.01	130	1.168	1.168	0.95	0.92	0.62	94.09	6.70	0.41	7.12	1.06	65.12	2.04	1.00	1.00	0.326	Non-Liq.	5.0	17.9	Non-Liq.	5.0	0.32	
20.67	6.30	110.23	0.74	0.67	10.56	130	1.200	1.200	0.95	0.68	0.55	93.14	9.96	0.17	10.13	1.02												

Depth (feet)	Tip Friction			Total			Eff.			Max			Moss			Moss			Moss			Clean			Induced Liquefac.			Volumetric																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Qc (tsf)	Fs (tsf)	Ratio Fs/Qc	qc (pcf)	Unit Wt. (pcf)	Stress p'o (tsf)	Stress p'o (tsf)	rd	%	F	n	Cq	Q	MPa	q1	MPa	q2	MPa	q3	MPa	q4	MPa	q5	MPa	q6	MPa	q7	MPa	q8	MPa	q9	MPa	q10	MPa	q11	MPa	q12	MPa	q13	MPa	q14	MPa	q15	MPa	q16	MPa	q17	MPa	q18	MPa	q19	MPa	q20	MPa	q21	MPa	q22	MPa	q23	MPa	q24	MPa	q25	MPa	q26	MPa	q27	MPa	q28	MPa	q29	MPa	q30	MPa	q31	MPa	q32	MPa	q33	MPa	q34	MPa	q35	MPa	q36	MPa	q37	MPa	q38	MPa	q39	MPa	q40	MPa	q41	MPa	q42	MPa	q43	MPa	q44	MPa	q45	MPa	q46	MPa	q47	MPa	q48	MPa	q49	MPa	q50	MPa	q51	MPa	q52	MPa	q53	MPa	q54	MPa	q55	MPa	q56	MPa	q57	MPa	q58	MPa	q59	MPa	q60	MPa	q61	MPa	q62	MPa	q63	MPa	q64	MPa	q65	MPa	q66	MPa	q67	MPa	q68	MPa	q69	MPa	q70	MPa	q71	MPa	q72	MPa	q73	MPa	q74	MPa	q75	MPa	q76	MPa	q77	MPa	q78	MPa	q79	MPa	q80	MPa	q81	MPa	q82	MPa	q83	MPa	q84	MPa	q85	MPa	q86	MPa	q87	MPa	q88	MPa	q89	MPa	q90	MPa	q91	MPa	q92	MPa	q93	MPa	q94	MPa	q95	MPa	q96	MPa	q97	MPa	q98	MPa	q99	MPa	q100	MPa	q101	MPa	q102	MPa	q103	MPa	q104	MPa	q105	MPa	q106	MPa	q107	MPa	q108	MPa	q109	MPa	q110	MPa	q111	MPa	q112	MPa	q113	MPa	q114	MPa	q115	MPa	q116	MPa	q117	MPa	q118	MPa	q119	MPa	q120	MPa	q121	MPa	q122	MPa	q123	MPa	q124	MPa	q125	MPa	q126	MPa	q127	MPa	q128	MPa	q129	MPa	q130	MPa	q131	MPa	q132	MPa	q133	MPa	q134	MPa	q135	MPa	q136	MPa	q137	MPa	q138	MPa	q139	MPa	q140	MPa	q141	MPa	q142	MPa	q143	MPa	q144	MPa	q145	MPa	q146	MPa	q147	MPa	q148	MPa	q149	MPa	q150	MPa	q151	MPa	q152	MPa	q153	MPa	q154	MPa	q155	MPa	q156	MPa	q157	MPa	q158	MPa	q159	MPa	q160	MPa	q161	MPa	q162	MPa	q163	MPa	q164	MPa	q165	MPa	q166	MPa	q167	MPa	q168	MPa	q169	MPa	q170	MPa	q171	MPa	q172	MPa	q173	MPa	q174	MPa	q175	MPa	q176	MPa	q177	MPa	q178	MPa	q179	MPa	q180	MPa	q181	MPa	q182	MPa	q183	MPa	q184	MPa	q185	MPa	q186	MPa	q187	MPa	q188	MPa	q189	MPa	q190	MPa	q191	MPa	q192	MPa	q193	MPa	q194	MPa	q195	MPa	q196	MPa	q197	MPa	q198	MPa	q199	MPa	q200	MPa	q201	MPa	q202	MPa	q203	MPa	q204	MPa	q205	MPa	q206	MPa	q207	MPa	q208	MPa	q209	MPa	q210	MPa	q211	MPa	q212	MPa	q213	MPa	q214	MPa	q215	MPa	q216	MPa	q217	MPa	q218	MPa	q219	MPa	q220	MPa	q221	MPa	q222	MPa	q223	MPa	q224	MPa	q225	MPa	q226	MPa	q227	MPa	q228	MPa	q229	MPa	q230	MPa	q231	MPa	q232	MPa	q233	MPa	q234	MPa	q235	MPa	q236	MPa	q237	MPa	q238	MPa	q239	MPa	q240	MPa	q241	MPa	q242	MPa	q243	MPa	q244	MPa	q245	MPa	q246	MPa	q247	MPa	q248	MPa	q249	MPa	q250	MPa	q251	MPa	q252	MPa	q253	MPa	q254	MPa	q255	MPa	q256	MPa	q257	MPa	q258	MPa	q259	MPa	q260	MPa	q261	MPa	q262	MPa	q263	MPa	q264	MPa	q265	MPa	q266	MPa	q267	MPa	q268	MPa	q269	MPa	q270	MPa	q271	MPa	q272	MPa	q273	MPa	q274	MPa	q275	MPa	q276	MPa	q277	MPa	q278	MPa	q279	MPa	q280	MPa	q281	MPa	q282	MPa	q283	MPa	q284	MPa	q285	MPa	q286	MPa	q287	MPa	q288	MPa	q289	MPa	q290	MPa	q291	MPa	q292	MPa	q293	MPa	q294	MPa	q295	MPa	q296	MPa	q297	MPa	q298	MPa	q299	MPa	q300	MPa	q301	MPa	q302	MPa	q303	MPa	q304	MPa	q305	MPa	q306	MPa	q307	MPa	q308	MPa	q309	MPa	q310	MPa	q311	MPa	q312	MPa	q313	MPa	q314	MPa	q315	MPa	q316	MPa	q317	MPa	q318	MPa	q319	MPa	q320	MPa	q321	MPa	q322	MPa	q323	MPa	q324	MPa	q325	MPa	q326	MPa	q327	MPa	q328	MPa	q329	MPa	q330	MPa	q331	MPa	q332	MPa	q333	MPa	q334	MPa	q335	MPa	q336	MPa	q337	MPa	q338	MPa	q339	MPa	q340	MPa	q341	MPa	q342	MPa	q343	MPa	q344	MPa	q345	MPa	q346	MPa	q347	MPa	q348	MPa	q349	MPa	q350	MPa	q351	MPa	q352	MPa	q353	MPa	q354	MPa	q355	MPa	q356	MPa	q357	MPa	q358	MPa	q359	MPa	q360	MPa	q361	MPa	q362	MPa	q363	MPa	q364	MPa	q365	MPa	q366	MPa	q367	MPa	q368	MPa	q369	MPa	q370	MPa	q371	MPa	q372	MPa	q373	MPa	q374	MPa	q375	MPa	q376	MPa	q377	MPa	q378	MPa	q379	MPa	q380	MPa	q381	MPa	q382	MPa	q383	MPa	q384	MPa	q385	MPa	q386	MPa	q387	MPa	q388	MPa	q389	MPa	q390	MPa	q391	MPa	q392	MPa	q393	MPa	q394	MPa	q395	MPa	q396	MPa	q397	MPa	q398	MPa	q399	MPa	q400	MPa	q401	MPa	q402	MPa	q403	MPa	q404	MPa	q405	MPa	q406	MPa	q407	MPa	q408	MPa	q409	MPa	q410	MPa	q411	MPa	q412	MPa	q413	MPa	q414	MPa	q415	MPa	q416	MPa	q417	MPa	q418	MPa	q419	MPa	q420	MPa	q421	MPa	q422	MPa	q423	MPa	q424	MPa	q425	MPa	q426	MPa	q427	MPa	q428	MPa	q429	MPa	q430	MPa	q431	MPa	q432	MPa	q433	MPa	q434	MPa	q435	MPa	q436	MPa	q437	MPa	q438	MPa	q439	MPa	q440	MPa	q441	MPa	q442	MPa	q443	MPa	q444	MPa	q445	MPa	q446	MPa	q447	MPa	q448	MPa	q449	MPa	q450	MPa	q451	MPa	q452	MPa	q453	MPa	q454	MPa	q455	MPa	q456	MPa	q457	MPa	q458	MPa	q459	MPa	q460	MPa	q461	MPa	q462	MPa	q463	MPa	q464	MPa	q465	MPa	q466	MPa	q467	MPa	q468	MPa	q469	MPa	q470	MPa	q471	MPa	q472	MPa	q473	MPa	q474	MPa	q475	MPa	q476	MPa	q477	MPa	q478	MPa	q479	MPa	q480	MPa	q481	MPa	q482	MPa	q483	MPa	q484	MPa	q485	MPa	q486	MPa	q487	MPa	q488	MPa	q489	MPa	q490	MPa	q491	MPa	q492	MPa	q493	MPa	q494	MPa	q495	MPa	q496	MPa	q497	MPa	q498	MPa	q499	MPa	q500	MPa	q501	MPa	q502	MPa	q503	MPa	q504	MPa	q505	MPa	q506	MPa	q507	MPa	q508	MPa	q509	MPa	q510	MPa	q511	MPa	q512	MPa	q513	MPa	q514	MPa	q515	MPa	q516	MPa	q517	MPa	q518	MPa	q519	MPa	q520	MPa	q521	MPa	q522	MPa	q523	MPa	q524	MPa	q525	MPa	q526	MPa	q527	MPa	q528	MPa	q529	MPa	q530	MPa	q531	MPa	q532	MPa	q533	MPa	q534	MPa	q535	MPa	q536	MPa	q537	MPa	q538	MPa	q539	MPa	q540	MPa	q541	MPa	q542	MPa	q543	MPa	q544	MPa	q545	MPa	q546	MPa	q547	MPa	q548	MPa	q549	MPa	q550	MPa	q551	MPa	q552	MPa	q553	MPa	q554	MPa	q555	MPa	q556	MPa	q557	MPa	q558	MPa	q559	MPa	q560	MPa	q561	MPa	q562	MPa	q563	MPa	q564	MPa	q565	MPa	q566	MPa	q567	MPa	q568	MPa	q569	MPa	q570	MPa	q571	MPa	q572	MPa	q573	MPa	q574	MPa	q575	MPa	q576	MPa	q577	MPa	q578	MPa	q579	MPa	q580	MPa	q581	MPa	q582	MPa	q583	MPa	q584	MPa	q585	MPa	q586	MPa	q587	MPa	q588	MPa	q589	MPa	q590	MPa	q591	MPa	q592	MPa	q593	MPa	q594	MPa	q595	MPa	q596	MPa	q597	MPa	q598	MPa	q599	MPa	q600	MPa	q601	MPa	q602	MPa	q603	MPa	q604	MPa	q605	MPa	q606	MPa	q607	MPa	q608	MPa	q609	MPa	q610	MPa	q611	MPa	q612	MPa	q613	MPa	q614	MPa	q615	MPa	q616	MPa	q617	MPa	q618	MPa	q619	MPa	q620	MPa	q621	MPa	q622	MPa	q623	MPa	q624	MPa	q625	MPa	q626	MPa	q627	MPa	q628	MPa	q629	MPa	q630	MPa	q631	MPa	q632	MPa	q633	MPa	q634	MPa	q635	MPa	q636	MPa	q637	MPa	q638	MPa	q639	MPa	q640	MPa	q641	MPa	q642	MPa	q643	MPa	q644	MPa	q645	MPa	q646	MPa	q647	MPa	q648	MPa	q649	MPa	q650	MPa	q651	MPa	q652	MPa	q653	MPa	q654	MPa	q655	MPa	q656	MPa	q657	MPa	q658	MPa	q659	MPa	q660	MPa	q661	MPa	q662	MPa	q663	MPa	q664	MPa	q665	MPa	q666	MPa	q667	MPa	q668	MPa	q669	MPa	q670	MPa	q671	MPa	q672	MPa	q673	MPa	q674	MPa	q675	MPa	q676	MPa

Depth (feet)	Tip Qc (tsf)	Friction		Total Unit Wt. (pcf)	Total Stress po (tsf)	Eff. Stress p'o (tsf)	F %	Max Cq	Moss qc1 MPa	Moss Δqc MPa	Moss qc1max MPa	Moss eff	Kc	Qc1n lc	Liquef. Suscept. (0 or 1)	Rel. Dens. Dr (%)	Kc	Kc	Clean Sand Qc1n	Kc	CRR	CSR	M=7.5 Factor	Induced Safety	Liquefac. Ratio	Qc1n N1(ge)	Equiv. N1(ge)	FC Adj. ΔN1(ge)	Equiv. N1(ge)	Equiv. N1(ge)	Volumetric Strain (%)
		Qc	Fs																												
55.61	16.95	290.80	2.48	0.85	3.471	2.445	0.698	0.86	0.51	0.65	177.61	20.88	0.42	21.31	1.02	1.00	1.02	1.00	183.5	0.72	infin.	0.506	Non-Liq.	5.7	31.4	5.3	36.7	0.00			
56.10	17.10	360.03	3.26	0.90	3.503	2.462	0.693	0.91	0.50	0.66	221.55	26.29	0.48	26.78	1.02	1.00	1.00	1.00	223.1	0.71	infin.	0.504	Non-Liq.	5.8	38.4	6.2	44.6	0.00			
56.59	17.25	400.57	3.01	0.75	3.535	2.479	0.689	0.76	0.50	0.65	245.83	28.77	0.30	29.07	1.01	1.00	1.00	1.00	247.4	0.71	infin.	0.502	Non-Liq.	6.0	41.4	8.1	49.5	0.00			
57.09	17.40	418.17	2.54	0.61	3.567	2.495	0.684	0.61	0.50	0.65	255.83	29.27	0.13	29.40	1.00	1.00	1.00	1.00	257.4	0.71	infin.	0.500	Non-Liq.	6.1	42.0	9.5	51.5	0.00			
57.58	17.55	414.93	2.90	0.70	3.599	2.512	0.680	0.70	0.50	0.65	252.99	29.47	0.24	29.70	1.01	1.00	1.00	1.00	254.5	0.71	infin.	0.498	Non-Liq.	6.0	42.1	8.8	50.9	0.00			
58.07	17.70	379.50	3.12	0.82	3.631	2.529	0.675	0.83	0.50	0.65	230.48	27.27	0.38	27.65	1.01	1.00	1.00	1.00	232.0	0.71	infin.	0.496	Non-Liq.	5.9	39.4	7.0	46.4	0.00			
58.56	17.85	355.73	3.27	0.92	3.663	2.546	0.671	0.92	0.50	0.64	215.06	25.73	0.50	26.22	1.02	1.00	1.00	1.00	216.3	0.70	infin.	0.494	Non-Liq.	5.8	37.5	5.8	43.3	0.00			
59.05	18.00	343.13	3.57	1.04	3.695	2.562	0.667	1.05	0.52	0.63	203.89	25.06	0.64	25.70	1.03	1.00	1.00	1.00	213.0	0.70	infin.	0.492	Non-Liq.	5.7	36.2	6.4	42.6	0.00			
59.55	18.15	327.50	3.54	1.08	3.727	2.578	0.663	1.09	0.52	0.63	192.50	23.90	0.69	24.58	1.03	1.00	1.00	1.00	205.0	0.70	infin.	0.490	Non-Liq.	5.6	34.6	6.4	41.0	0.00			
60.04	18.30	335.07	3.18	0.95	3.759	2.595	0.659	0.95	0.51	0.63	198.81	24.08	0.53	24.61	1.02	1.00	1.00	1.00	204.8	0.70	infin.	0.488	Non-Liq.	5.7	35.1	5.9	41.0	0.00			
60.53	18.45	365.90	2.57	0.70	3.791	2.612	0.655	0.71	0.50	0.64	218.55	25.45	0.24	25.69	1.01	1.00	1.00	1.00	220.1	0.70	infin.	0.486	Non-Liq.	6.0	37.0	7.0	44.0	0.00			
61.02	18.60	319.70	2.06	0.64	3.823	2.628	0.651	0.65	0.50	0.63	190.14	21.74	0.17	21.91	1.01	1.00	1.00	1.00	191.7	0.69	infin.	0.484	Non-Liq.	5.9	32.4	5.9	38.3	0.00			
61.52	18.75	381.50	1.88	0.49	3.855	2.645	0.647	0.50	0.50	0.63	226.48	25.23	0.00	25.23	1.00	1.00	1.00	1.00	228.1	0.69	infin.	0.482	Non-Liq.	6.2	36.9	8.7	45.6	0.00			
62.01	18.90	443.73	1.88	0.42	3.887	2.662	0.643	0.43	0.50	0.63	262.84	28.92	0.00	28.92	1.00	1.00	1.00	1.00	264.4	0.69	infin.	0.480	Non-Liq.	6.4	41.6	10.0	51.6	0.00			
62.50	19.05	409.80	2.03	0.50	3.919	2.678	0.640	0.50	0.50	0.63	241.86	27.13	0.00	27.13	1.00	1.00	1.00	1.00	243.4	0.69	infin.	0.479	Non-Liq.	6.2	39.2	9.5	48.7	0.00			
62.99	19.20	385.13	1.98	0.51	3.951	2.695	0.636	0.52	0.50	0.63	226.48	25.45	0.02	25.47	1.00	1.00	1.00	1.00	228.0	0.69	infin.	0.477	Non-Liq.	6.1	37.1	8.5	45.6	0.00			
63.48	19.35	379.33	1.76	0.46	3.983	2.711	0.633	0.47	0.50	0.62	222.36	24.60	0.00	24.60	1.00	1.00	1.00	1.00	224.0	0.69	infin.	0.475	Non-Liq.	6.2	36.2	8.6	44.8	0.00			
63.98	19.50	400.87	1.82	0.45	4.015	2.728	0.629	0.46	0.50	0.62	234.35	25.95	0.00	25.95	1.00	1.00	1.00	1.00	236.0	0.68	infin.	0.473	Non-Liq.	6.2	37.8	9.4	47.2	0.00			
64.47	19.65	455.93	1.97	0.43	4.047	2.745	0.626	0.43	0.50	0.62	265.94	29.47	0.00	29.47	1.00	1.00	1.00	1.00	267.6	0.68	infin.	0.472	Non-Liq.	6.4	42.1	10.0	52.1	0.00			

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Doris and Patterson Project No: VT-24867-10

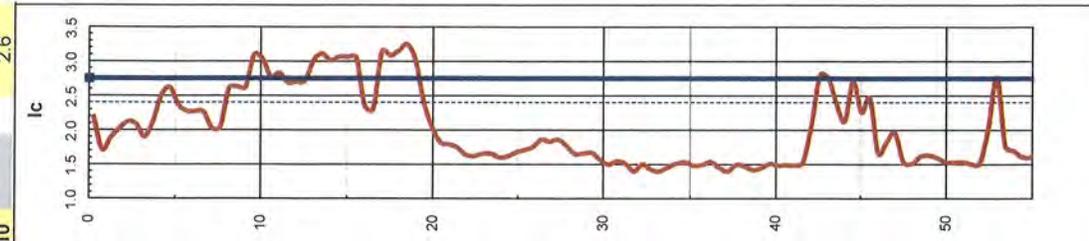
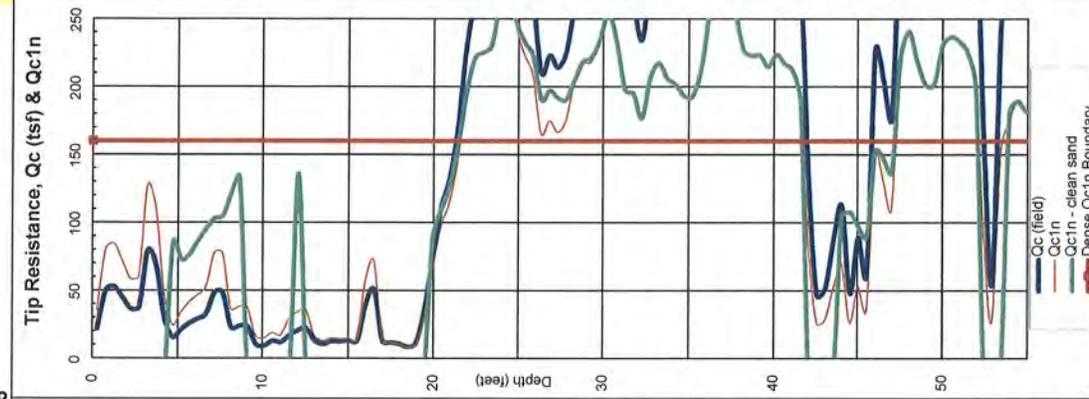
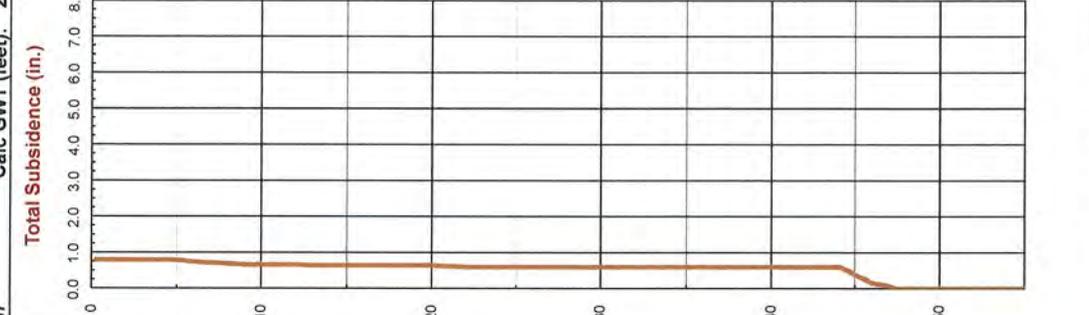
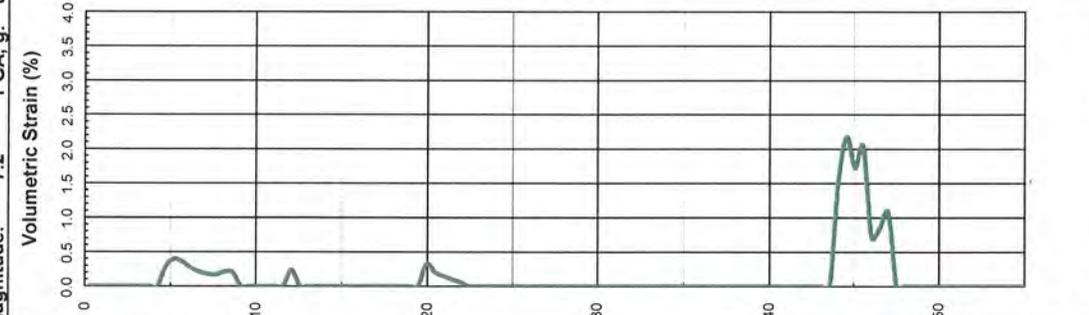
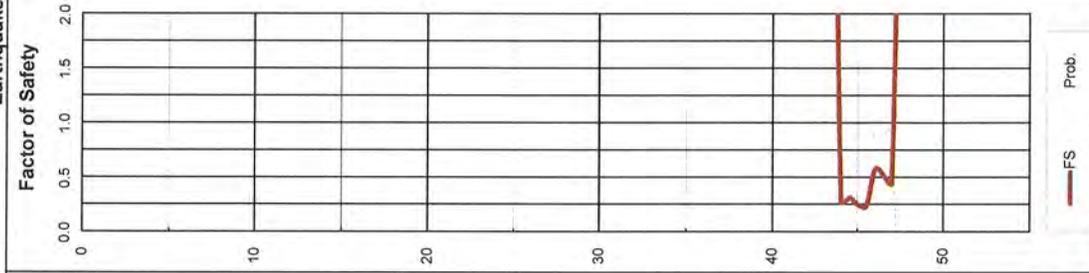
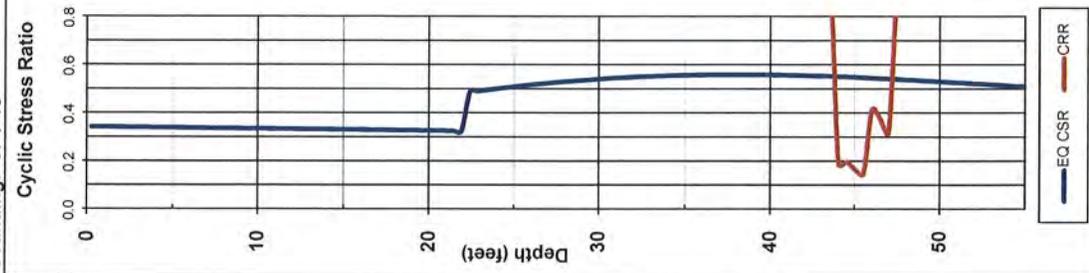
Method Used: 1 1998 NCEER (Robertson & Wride)

Settlement Analysis using Tokimatsu & Seed (1987), clean sand $Qc1/n/N(60)$ ratio = 5
 PGA, g: 0.87 Calc GWT (feet): 22.5

Sounding: CPT-10

Plot 10

Limiting Ic: 2.6



Total Thickness of Liquefiable Layers: 3.4 feet

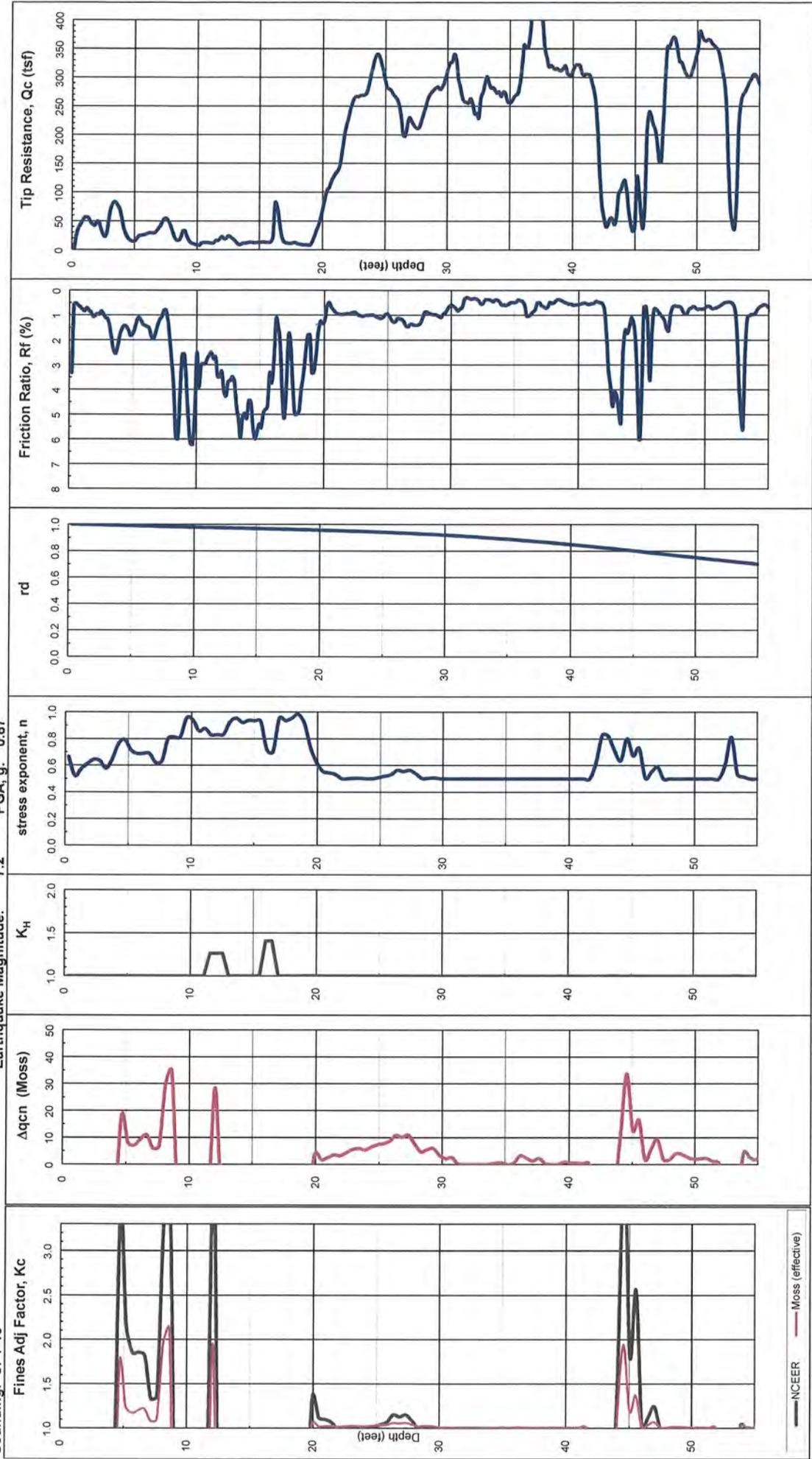
Estimated Total Ground Subsidence (Settlement): 0.8 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

3 avg increment = 0.15m Qc1:n/N1(60): 5
 Ignore 1st/last increment into sand/silt soils: 0
 Sounding: CPT-10

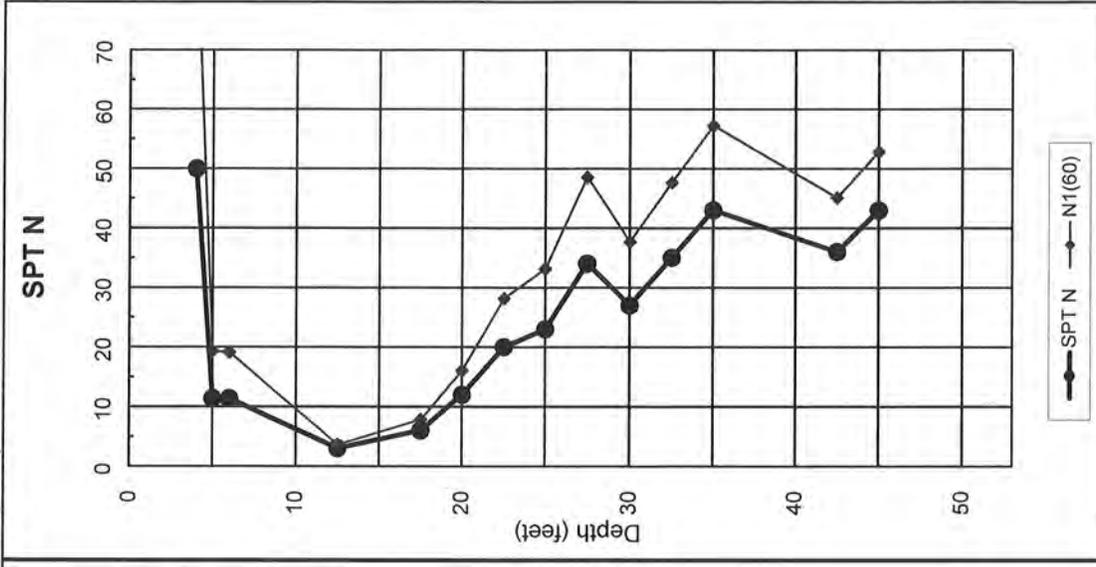
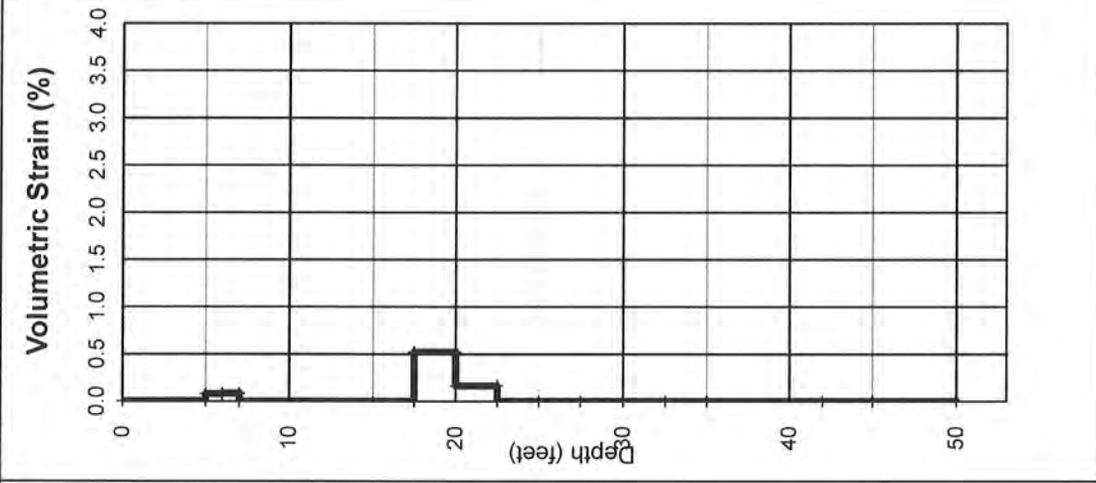
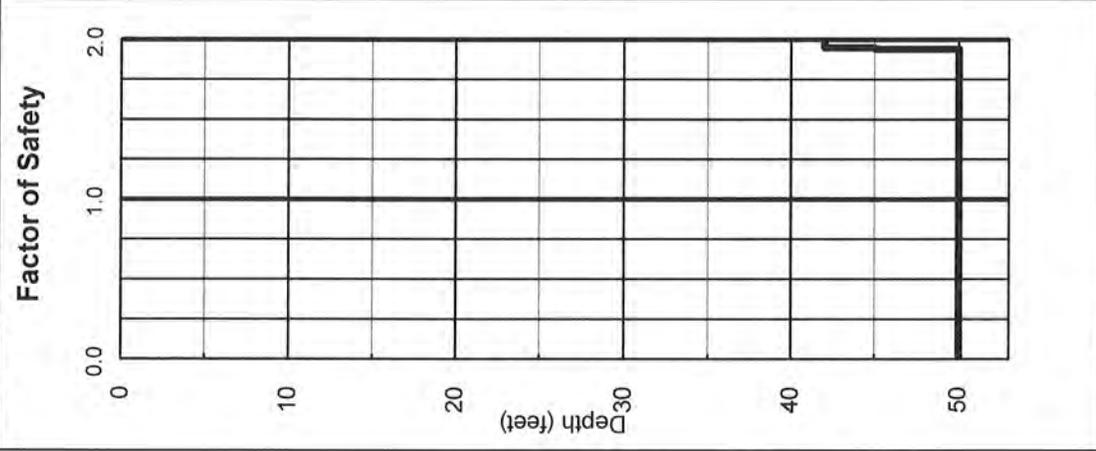
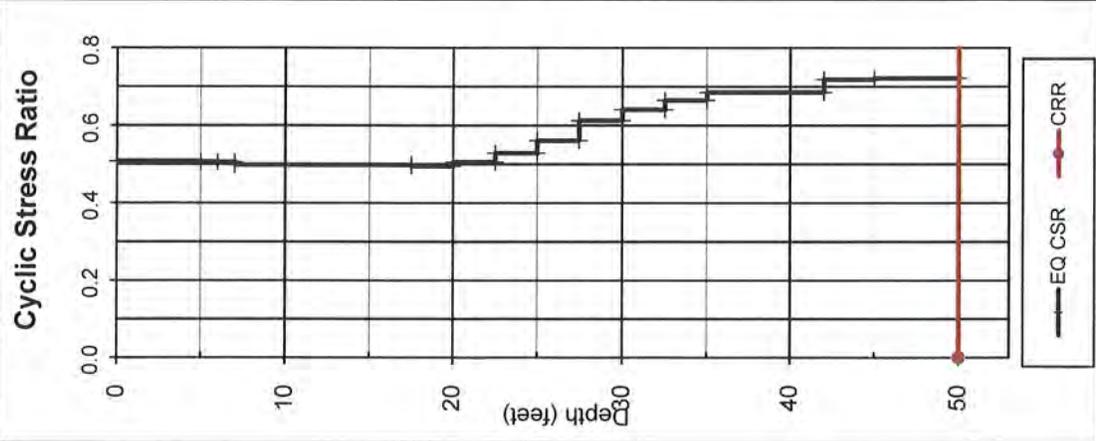
Method Used: 1998 NCEER (Robertson & Wride)

Earthquake Magnitude: 7.2 PGA, g: 0.87



EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-13 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Calc GWT (feet): 23** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**

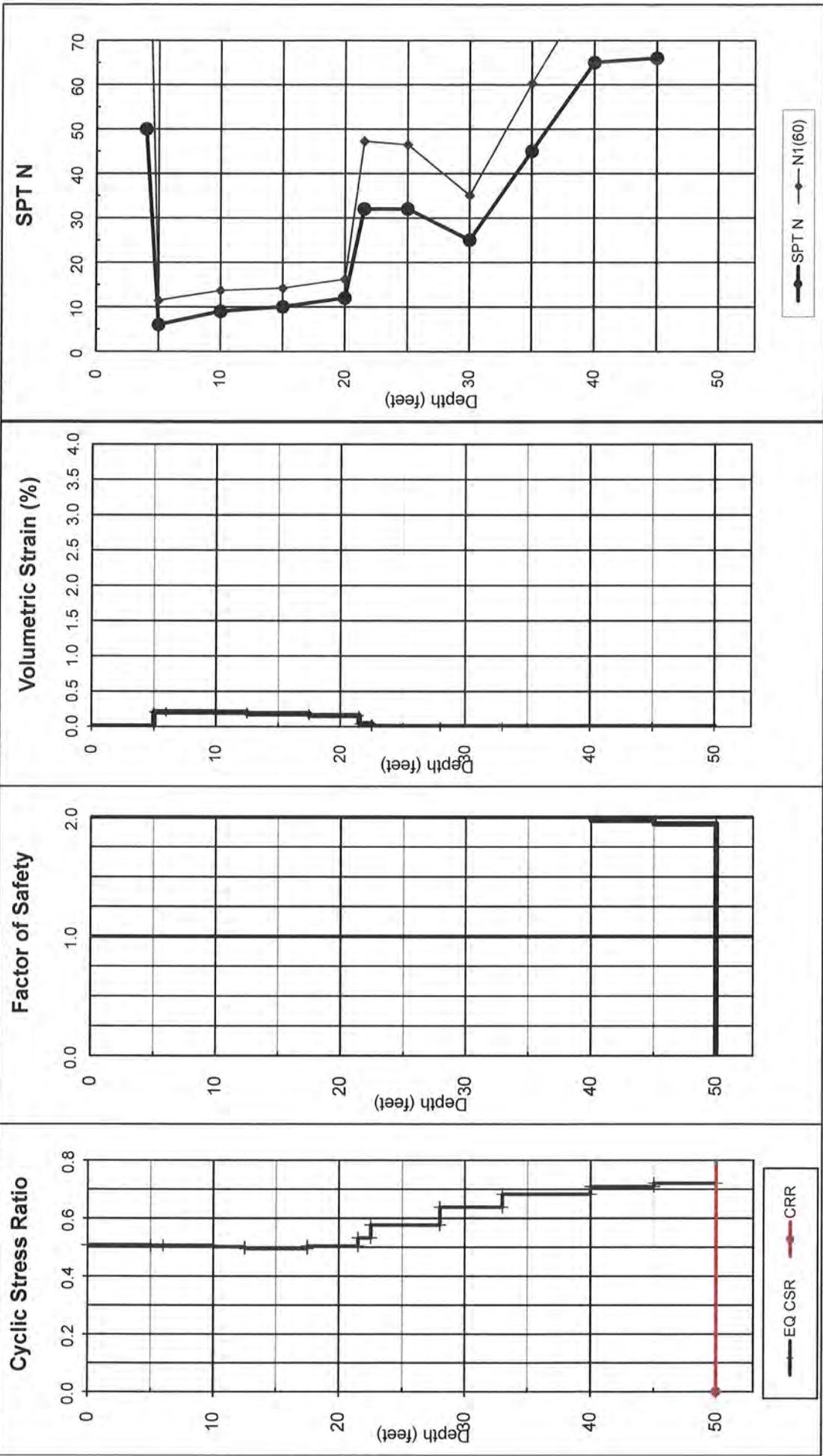


Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.2 inches

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Boring: B-16 **Earthquake Magnitude: 7.2** **PGA, g: 0.87** **Project No: VT-24867-10** **1996/1998 NCEER Method**
Doris & Patterson K-8 School **Ground Compaction Remediated to 5 foot depth**
Calc GWT (feet): 23



Total Thickness of Liquefiable Layers: 0.0 feet

Estimated Total Ground Subsidence: 0.4 inches

Liquefaction Induced Lateral Spreading with Ground Slope Conditions
(Groundwater at the Historical Highest Level of 6 Feet Below Ground Surface)

Job Number: VT-24867-10
 Job Name: Doris & Patterson K-8 School
 CPT Number: CPT-1
 Date: September 26, 2017
 Calculated By: PVB

Prediction of Liquefaction Induced Lateral Spreading with Ground Slope Conditions

Based on Data Published in the ASCE Journal of Geotechnical and Geoenvironmental Engineering December 2002
 (Bartlett and Youd 2002)

Variables Used in Calculation Defined

Earthquake Magnitude (M)

Horizontal Distance to Nearest Seismic Energy Source, km (R)

Percent Slope (S)

Cumulative Thickness in Meters of Saturated Cohesionless Sediments with SPT (N1)₆₀ Values <= 15 (T₁₅)

Average Fines Content in Percent (F₁₅)

Mean Grain size in millimeters (D50₁₅)

$\text{Log } D_H = -16.213 + 1.532M - 1.406 \text{Log}(R + 10^{(0.89M - 5.64)}) - 0.012R + 0.338 \text{Log}S + 0.540 \text{Log}T_{15} + 3.413 \text{Log}(100 - F_{15}) - 0.795 \text{Log}(D50_{15} + 0.1 \text{mm})$

Requirements and Limitations Used to Develop this Model

Soils must be Liquefiable

Saturated Cohesionless Sediments with SPT (N1)₆₀ less than 15

Earthquake Magnitude (M) must be between 6 and 8

Percent Slope (S) must be between 0.1% and 6%

Cumulative Thickness (T₁₅) must be between 1 and 15 meters

Depth to top of Liquefied layer must be between 1 and 10 meters

Distance to Fault Rupture (R_{eq}) must be determined using Figure 10 if soft soils are present.

F₁₅ and D50₁₅ must be within bounds shown in Fig. 5.

If R or R_{eq} < 0.5 km use 0.5; otherwise use R or R_{eq}.

Input Values	
M = 7.2	
R = 4.5	km
S = 0.3	%
T ₁₅ = 2.4	m
F ₁₅ = 50	%
D50 ₁₅ = 0.4	mm

Horizontal Ground Displacement in meters (D_H) = 0.25

Horizontal Ground Displacement in feet (D_H) = 0.8

Displacements should be between 0.1 and 6 meters and should be multiplied by a FOS of 2 for a conservative estimate. Any displacement greater than 6 meters is outside of the data set used in the analysis and may not be an accurate estimate.

Job Number: VT-24867-10
 Job Name: Doris & Patterson K-8 School
 CPT Number: CPT-4
 Date: September 1, 2017
 Calculated By: PVB

Prediction of Liquefaction Induced Lateral Spreading with Ground Slope Conditions

Based on Data Published in the ASCE Journal of Geotechnical and Geoenvironmental Engineering December 2002
 (Bartlett and Youd 2002)

Variables Used in Calculation Defined

Earthquake Magnitude (M)
 Horizontal Distance to Nearest Seismic Energy Source, km (R)
 Percent Slope (S)
 Cumulative Thickness in Meters of Saturated Cohesionless Sediments with SPT (N1)₆₀ Values <= 15 (T₁₅)
 Average Fines Content in Percent (F₁₅)
 Mean Grain size in millimeters (D50₁₅)
 $\text{Log } D_H = -16.213 + 1.532M - 1.406 \text{Log}(R + 10^{(0.89M - 5.64)}) - 0.012R + 0.338 \text{Log}S + 0.540 \text{Log}T_{15} + 3.413 \text{Log}(100 - F_{15}) - 0.795 \text{Log}(D50_{15} + 0.1 \text{mm})$

Requirements and Limitations Used to Develop this Model

Soils must be Liquefiable
 Saturated Cohesionless Sediments with SPT (N1)₆₀ less than 15
 Earthquake Magnitude (M) must be between 6 and 8
 Percent Slope (S) must be between 0.1% and 6%
 Cumulative Thickness (T₁₅) must be between 1 and 15 meters
 Depth to top of Liquefied layer must be between 1 and 10 meters
 Distance to Fault Rupture (R_{eq}) must be determined using Figure 10 if soft soils are present.
 F₁₅ and D50₁₅ must be within bounds shown in Fig. 5.
 If R or R_{eq} < 0.5 km use 0.5; otherwise use R or R_{eq}.

Input Values	
M = 7.2	
R = 4.5	km
S = 0.3	%
T ₁₅ = 2.2	m
F ₁₅ = 30	%
D50 ₁₅ = 0.6	mm

Horizontal Ground Displacement in meters (D_H) = 0.58

Horizontal Ground Displacement in feet (D_H) = 1.9

Displacements should be between 0.1 and 6 meters and should be multiplied by a FOS of 2 for a conservative estimate. Any displacement greater than 6 meters is outside of the data set used in the analysis and may not be an accurate estimate.

Job Number: VT-24867-10
 Job Name: Doris & Patterson K-8 School
 CPT Number: CPT-6
 Date: September 26, 2017
 Calculated By: PVB

Prediction of Liquefaction Induced Lateral Spreading with Ground Slope Conditions

Based on Data Published in the ASCE Journal of Geotechnical and Geoenvironmental Engineering December 2002
 (Bartlett and Youd 2002)

Variables Used in Calculation Defined

Earthquake Magnitude (M)
 Horizontal Distance to Nearest Seismic Energy Source, km (R)
 Percent Slope (S)
 Cumulative Thickness in Meters of Saturated Cohesionless Sediments with SPT (N1)₆₀ Values <= 15 (T₁₅)
 Average Fines Content in Percent (F₁₅)
 Mean Grain size in millimeters (D50₁₅)
 $\text{Log } D_H = -16.213 + 1.532M - 1.406 \text{Log}(R + 10^{(0.89M - 5.64)}) - 0.012R + 0.338 \text{Log}S + 0.540 \text{Log}T_{15} + 3.413 \text{Log}(100 - F_{15}) - 0.795 \text{Log}(D50_{15} + 0.1 \text{mm})$

Requirements and Limitations Used to Develop this Model

Soils must be Liquefiable
 Saturated Cohesionless Sediments with SPT (N1)₆₀ less than 15
 Earthquake Magnitude (M) must be between 6 and 8
 Percent Slope (S) must be between 0.1% and 6%
 Cumulative Thickness (T₁₅) must be between 1 and 15 meters
 Depth to top of Liquefied layer must be between 1 and 10 meters
 Distance to Fault Rupture (R_{eq}) must be determined using Figure 10 if soft soils are present.
 F₁₅ and D50₁₅ must be within bounds shown in Fig. 5.
 If R or R_{eq} < 0.5 km use 0.5; otherwise use R or R_{eq}.

Input Values	
M = 7.2	
R = 4.5	km
S = 0.3	%
T ₁₅ = 0.9	m
F ₁₅ = 30	%
D50 ₁₅ = 0.6	mm

Horizontal Ground Displacement in meters (D_H) = 0.36

Horizontal Ground Displacement in feet (D_H) = 1.2

Displacements should be between 0.1 and 6 meters and should be multiplied by a FOS of 2 for a conservative estimate. Any displacement greater than 6 meters is outside of the data set used in the analysis and may not be an accurate estimate.

Job Number: VT-24867-10
 Job Name: Doris & Patterson K-8 School
 CPT Number: CPT-10
 Date: September 26, 2017
 Calculated By: PVB

Prediction of Liquefaction Induced Lateral Spreading with Ground Slope Conditions

Based on Data Published in the ASCE Journal of Geotechnical and Geoenvironmental Engineering December 2002
 (Bartlett and Youd 2002)

Variables Used in Calculation Defined

Earthquake Magnitude (M)
 Horizontal Distance to Nearest Seismic Energy Source, km (R)
 Percent Slope (S)
 Cumulative Thickness in Meters of Saturated Cohesionless Sediments with SPT (N1)₆₀ Values <= 15 (T₁₅)
 Average Fines Content in Percent (F₁₅)
 Mean Grain size in millimeters (D50₁₅)
 $\text{Log } D_H = -16.213 + 1.532M - 1.406 \text{Log}(R + 10^{(0.89M - 5.64)}) - 0.012R + 0.338 \text{Log}S + 0.540 \text{Log}T_{15} + 3.413 \text{Log}(100 - F_{15}) - 0.795 \text{Log}(D50_{15} + 0.1 \text{mm})$

Requirements and Limitations Used to Develop this Model

Soils must be Liquefiable
 Saturated Cohesionless Sediments with SPT (N1)₆₀ less than 15
 Earthquake Magnitude (M) must be between 6 and 8
 Percent Slope (S) must be between 0.1% and 6%
 Cumulative Thickness (T₁₅) must be between 1 and 15 meters
 Depth to top of Liquefied layer must be between 1 and 10 meters
 Distance to Fault Rupture (R_{eq}) must be determined using Figure 10 if soft soils are present.
 F₁₅ and D50₁₅ must be within bounds shown in Fig. 5.
 If R or R_{eq} < 0.5 km use 0.5; otherwise use R or R_{eq}.

Input Values	
M = 7.2	
R = 4.5	km
S = 0.3	%
T ₁₅ = 1.1	m
F ₁₅ = 50	%
D50 ₁₅ = 0.4	mm

Horizontal Ground Displacement in meters (D_H) = 0.17
 Horizontal Ground Displacement in feet (D_H) = 0.5

Displacements should be between 0.1 and 6 meters and should be multiplied by a FOS of 2 for a conservative estimate. Any displacement greater than 6 meters is outside of the data set used in the analysis and may not be an accurate estimate.

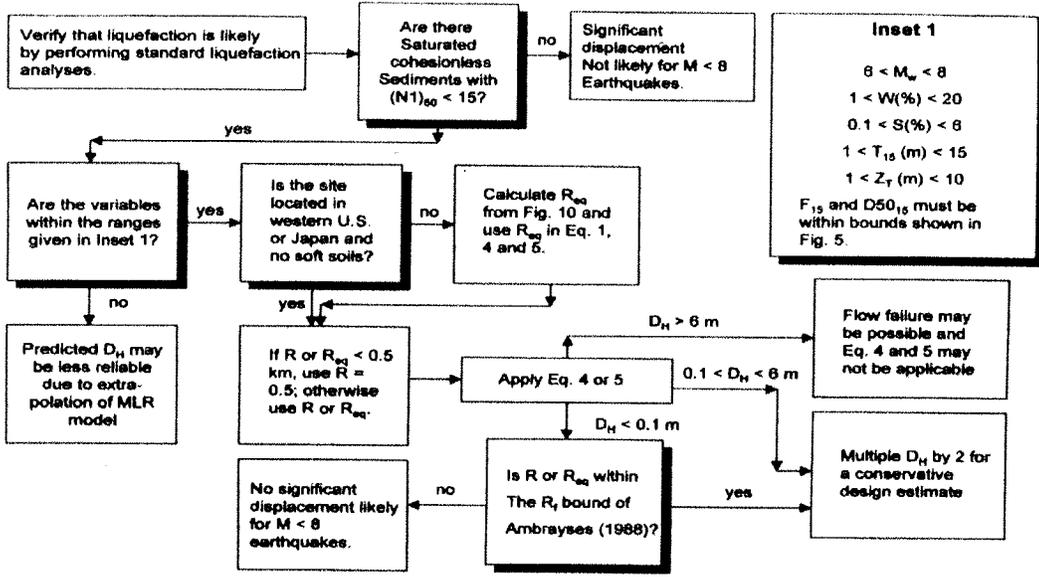


Fig. 9. Flow chart [for application of Eq. (6)]

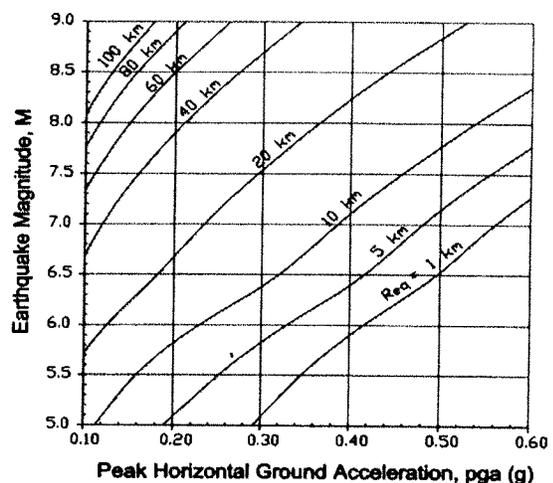


Fig. 10. Graph for determining equivalent source distance, R_{eq} , from magnitude, M , and peak acceleration, a_{max} (revised from Bartlett and Youd 1992, 1995). The above curves are the averages of pga from three different attenuation relations: Abrahamson and Silva (1997); Boore et al. (1997); and Campbell (1997). For the Abrahamson and Silva (1997) relation, the following parameters were used in the regression equation: a) R equals the distance to the fault rupture, b) fault type was set to "otherwise", c) HW=hanging wall factor was set to 1, which implies that sites are found on the hanging wall, d) site classification was set to 1 for deep soil sites. For the Boore, Joyner and Fumal (1997) relation, the following parameters were used in the regression equation: a) R is the closest horizontal distance (km) to a vertical projection of fault rupture surface (km), b) V_s in the upper 30 meters was set to 270 m/s, which is the mid range for a medium stiff soil (site class D), c) fault type was set to "fault mechanism not specified." For the Campbell (1997) relation, the following parameters were used in the regression equation: a) R is the closest distance to the seismogenic rupture surface (km), b) fault style factor was set to "otherwise", c) soft rock and hard rock site factors were set to "otherwise", which implies a stiff soil site.

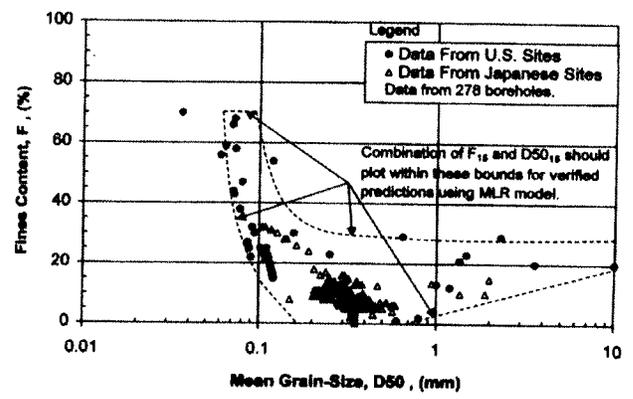
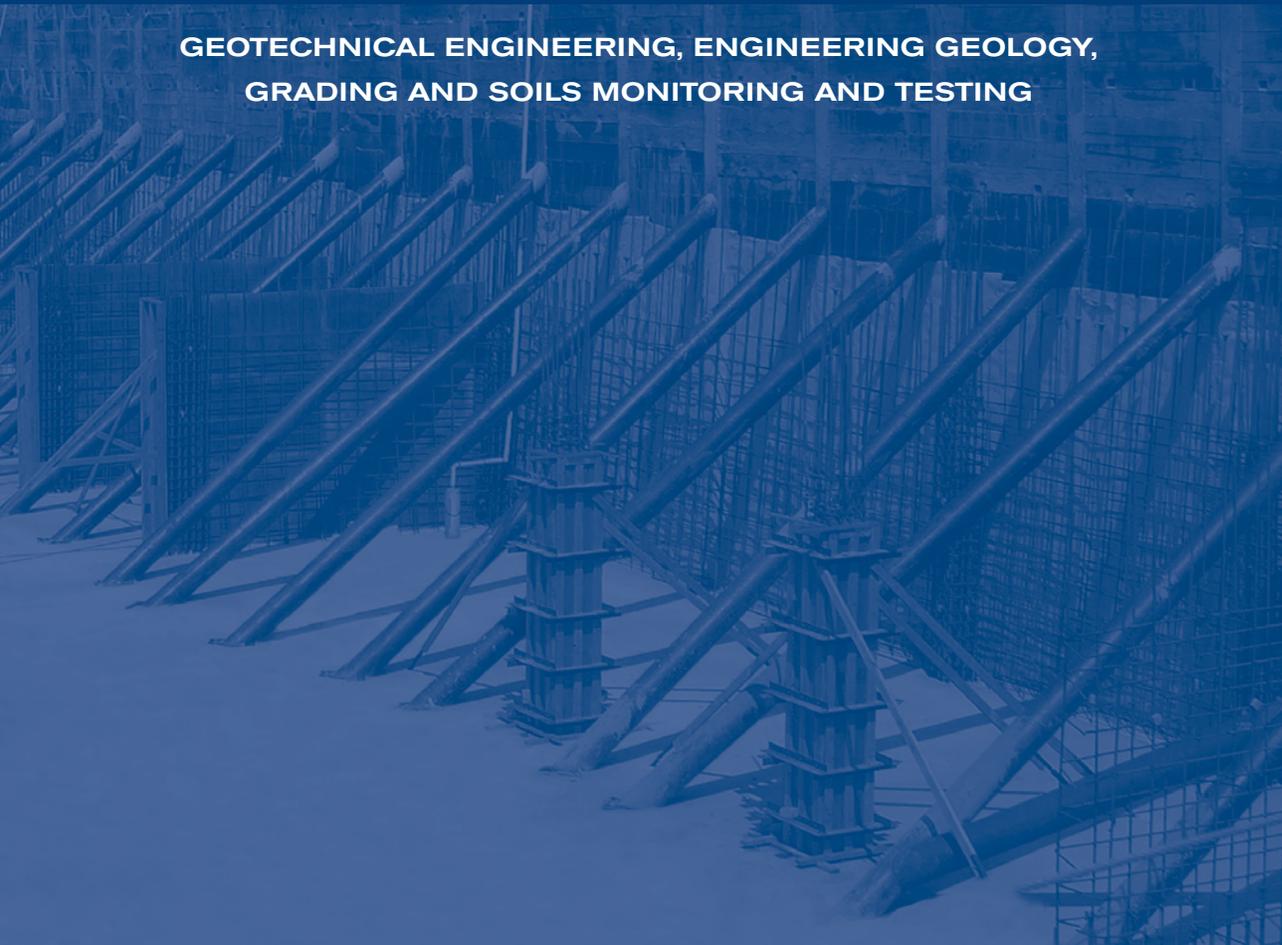


Fig. 5. Compiled grain-size data with ranges of F_{15} and $D50_{15}$ [for which Eq. (6) is applicable]



GEOTECHNICAL ENGINEERING, ENGINEERING GEOLOGY,
GRADING AND SOILS MONITORING AND TESTING



GEOHAZARD STUDY REPORT

**PROPOSED TEAL CLUB MIDDLE SCHOOL ACADEMY
2292 – 2372 DORIS AVENUE, OXNARD CA**

**PREPARED FOR:
OXNARD SCHOOL DISTRICT
ATTN: CALDWELL FLORES WINTERS, INC., *PROGRAM MANAGER*
1051 SOUTH A STREET
OXNARD, CA 93030**

**PREPARED BY:
KOURY GEOTECHNICAL SERVICES
14280 EUCLID AVENUE
CHINO, CALIFORNIA 91710**

**PROJECT NO. 13-0637
FEBRUARY 18, 2014**

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February 18, 2014
Project No.: 13-0637

Oxnard School District
c/o Caldwell Flores Winters, Inc.,
Attn: Tylor Middlestadt
1051 South A Street
Oxnard, CA 93030

Attn: Tylor Middlestadt

**SUBJECT: Geohazard Study Report
 Teal Club Middle School Academy
 2292-2372 Doris Avenue
 Oxnard, California**

1. INTRODUCTION

This report presents the results of a Geotechnical and Geological Investigation performed by Koury Geotechnical Services Inc. (Koury) Engineering & Testing Services, Inc., (Koury) at 2292 – 2372 Doris Avenue Oxnard, California for the proposed middle school academy. The Geotechnical Investigation was performed to provide geotechnical/geohazard information for the school site development.

The recommendations provided within this submittal are based on the results of our field exploration, laboratory testing, and engineering analyses. Our services were performed in general accordance with our Proposal No. 13-0637, dated December 17, 2013.

Our professional services have been performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable geotechnical consultants practicing in this or similar localities. No other warranty, express or implied, is made as to the professional advice included in this report. This report has been prepared exclusively for the Oxnard School District and their consultants for application to the subject project. The

report has not been prepared for use by other parties, and may not contain sufficient information for the purposes of other parties or other uses.

2. SITE CONDITIONS

The site for the proposed school presently consists of 20 acres of agricultural land located at the corner of Patterson Road and Doris Avenue in Oxnard, California. Ventura Road is the major point of access for Doris Avenue. Local access to the site is via unimproved “dirt” roads. The site is presently bounded on the north by Doris Avenue, on the west by Patterson Road and on the south and east by farm access unimproved roads. The relatively flat site slopes very gently to the southwest between approximate elevations 45 and 40 feet mean sea level. There are localized ditches along the property boundary. A site vicinity map, Figure A-1, is presented in Appendix A.

At the time of our field exploration, the site was used for agricultural purpose, and was supporting plantations of lettuce. The main water supply for onsite irrigation is from an onsite private well located along the southern boundary of the site. Except for the well and ancillary facilities, some underground and above ground utilities and power lines, we are unaware of other structures on site.

3. PROPOSED DEVELOPMENT

Koury understands that the Oxnard School District will develop the site for a new middle school academy. The site measures roughly 850 feet in the north-south direction and 1,070 feet in the east-west direction. The site will be developed for classrooms, gymnasium, administration, library, cafeteria, and a number of multi-purpose buildings. The buildings will be a combination of one and two story structures.

The proposed buildings will be located in an area measuring about 250 by 800 feet in the western portion of the site, about 200 feet east of Patterson Road. There will also be playfields such as soccer, baseball, softball and volleyball courts in the eastern portion of the site. The main parking areas will be along Patterson Road. The main access to the site

will be from Patterson Road through short driveways. Infrastructures such as roads, parking and underground utilities will also be constructed. The locations of the proposed buildings, parking and playfields are shown on Figure A-2.

Architectural and structural design details of the buildings were not provided. We understand that no basements are planned. We have assumed that the buildings will be constructed with structural steel framing, steel brace or light-framed shear walls. We have also assumed wall loading of 1 kip and 3 kips per linear foot for the one story and two story buildings, respectively. Column loads have been assumed to be less than 60 kips for one-story buildings and 150 kips for two-story buildings.

No grading plan was available at the time of preparation of this report. We have assumed that the finished grades will be within 2 feet of elevation of existing grades.

4. FIELD EXPLORATION

The field exploration program consisted of drilling three soil test borings within the proposed building areas and three percolation borings outside the building areas on January 24, 2014. The borings were drilled using a truck-mounted hollow-stem auger drill rig except for the percolation borings that were drilled with a hand auger. The hollow stem borings were drilled to approximate depths of 26 to 51 feet. In addition, we advanced three cone penetration tests (CPTs) to a maximum depth of 65 feet on January 22, 2014.

Standard penetration test samples, California ring samples, and bulk samples were obtained from the borings for soil classification and laboratory testing. The depths, blow counts, and description of the samples are shown on the attached Boring Logs presented in Appendix B of this report. The CPT profiles follow the boring logs in Appendix B. The boring contractor used a 140-lb automatic hammer to drive the samplers 18 inches into the soils. The locations of the borings and CPTs are shown on Figure A-2 presented in Appendix A.

5. LABORATORY TESTING

Laboratory tests, including moisture content, dry unit weight, Atterberg Limits, #200 sieve wash, consolidation, direct shear and pocket penetrometer, were performed on selected samples obtained from the borings to aid in the classification of the materials encountered and to evaluate their engineering properties. Sulfates, chlorides, resistivity, and PH tests (corrosivity tests) were also performed on selected samples. The results of the laboratory tests are presented on the boring logs in Appendix B, and/or in Appendix C.

6. SUBSURFACE SOIL CONDITIONS

The site is generally covered by a thin mantle of fill about 2 feet thick. Greater fill depths are locally present at utility locations and where ditches were previously excavated. The fill generally consists of sandy silt, sandy lean clay, and fine silty sand.

The fill is underlain by alluvium consisting predominantly of sandy silt and sandy clay within the upper 24 feet. The clay and silt are interbedded and also contains layers of silty sand. Below 24 feet to a depth of 65 feet, the soils consist predominantly of interbedded silty sand and poorly graded sand with some interbeds of sandy silt or sandy clay.

The alluvial clay and silt within the upper 24 feet were generally found to be firm to stiff. The sands below the silt and clay were generally medium dense to dense. The moisture contents of the silt and clay sample tested ranged from 18 to 31 percent with an average of about 22 percent. The dry unit weights of these soils ranged from 96 to 112 pcf with an average of about 103 pcf.

The laboratory consolidation test data indicates that the fine-grained soils are generally overconsolidated and, therefore, low to moderately compressible under the anticipated static load increase except for the soils near the ground surface. The CPT data also suggest that the silt and clay are moderately overconsolidated. No significant hydrocollapse was observed in the consolidation tests upon addition of water to the samples.

To verify the soil classification and characteristics, thirty seven No. 200 wash tests were performed on samples of the borings as shown on the attached boring logs. Three tests performed on the cleaner sands indicated 5 to 11 percent fines contents. The eight tests performed on silty sand materials indicated 13 to 47 percent fines with an average of about 30 percent. Twenty three tests on the silt and clay soils indicated 50 to 87 percent fines with an average of about 69 percent. Two Atterberg Limits indicated liquid limits of 21 and 28 and plasticity index of 5 and 8, respectively. Most laboratory test results are presented on the boring logs.

The soil conditions described in this report are based on the soils observed in the test borings drilled and the CPTs for this investigation and the laboratory test results. Variations between and beyond the borings and CPTs should be anticipated.

7. GROUNDWATER

The proposed development is located at approximate elevations 40 to 45 feet Above Mean Sea Level (AMSL). Based on our review of the groundwater map presented in the "Seismic Hazard Zone Report for the Oxnard Quadrangle; Seismic Hazard Zone Report 052" (Plate 1.2), published by "Department of Conservation, California Division of Mine and Geology", the historic high groundwater level is 8 feet below ground surface (Figure A-3 in Appendix A). We encountered groundwater at a depth of approximately 15 to 19 feet during drilling. Fluctuations of the groundwater level should be anticipated, including higher groundwater during the rainy season.

8. SITE GEOLOGY

The site is located on the Oxnard Plain within the Transverse Range province, which extends along the coast from the Santa Ynez Mountains to the Los Angeles Basin. The Transverse Range Province is an east-west trending belt of mountains and uplands bounded on the north by the Santa Ynez fault, on the east by the San Bernardino Mountains, on the south by the Transverse Ranges frontal fault zone, and on the west by the Pacific Ocean.

The Oxnard Plain is part of the Ventura Basin which is bounded on the north by the Santa Ynez-Topatopa Mountains and on the south by the Channel Islands, the western Santa Monica Mountains, and the Simi Hills. To the east, the basin is bounded by the San Gabriel fault zone. To the west, the Santa Barbara Channel separates the offshore islands from the mainland. Near the Santa Barbara Channel, the Ventura Basin is a transitional zone consisting of a coastal plain and shoreline. The coastal plain is composed of a broad alluvial plain, some of which forms estuaries and lagoons.

Based on the Ventura County Geologic Map for the Oxnard Quadrangle, the site is underlain by Holocene alluvial fan deposit composed predominantly of clay with interbeds of sand and occasional gravel (Calhan, 2003, Figure A-4). The borings drilled and CPTs advanced during our investigation encountered clay and silt over sand.

9. SEISMIC CONSIDERATIONS

9.1. General

The site, like the rest of Southern California, is located within a seismically active region as a result of being located near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is movement along the northwest-trending regional faults such as the San Andreas, San Jacinto, Newport-Inglewood and Whittier-Elsinore fault zones.

By definition of the California Geological Survey (CGS), an active fault is one which has had surface displacement within the Holocene Epoch (roughly the last 11,000 years). The CGS has defined a potentially active fault as any fault which has been active during the Quaternary Period (approximately the last 1,600,000 years). These definitions are used in delineating Earthquake Fault Zones as mandated by the Alquist-Priolo Geologic Hazard Zones Act of 1972 and as subsequently revised in 1997 as the Alquist-Priolo Earthquake Fault Zones. The intent of the act is to require fault investigations on sites located within Special Studies Zone to preclude new construction of certain inhabited structures across the trace of active faults.

The subject site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zones are the Simi-Santa Rosa Fault zone, the Ventura Fault, and the Oak Ridge Fault Zone. The Oak Ridge Fault surface expression is located about 4 miles north of the site and the Pita Point-Ventura about 5 miles north of the site (Figure A-5 in Appendix A). The Simi-Santa Rosa Fault zone is located about 6 miles east of the site. No evidence of active or potentially active faulting was observed on the subject site during our investigation. Surface rupture is not considered to be a potential hazard to the site.

Based on the information available at this time, it is our opinion that a M6.9 earthquake may occur on the Simi-Santa Rosa Fault and M7.2 earthquakes may occur on the Oak Ridge and on the Pitas Point-Ventura faults. Large earthquakes could occur on other faults in the general area, but because of their greater distance and/or lower probability of occurrence, they are less important to the site from a seismic shaking standpoint.

Due to the proximity of the site to the Simi-Santa Rosa Fault, Pita Point-Ventura Fault and the Oak Ridge Fault, near field effects from strong ground motion associated with a large earthquake along this fault may occur at the site. These near field effects, including “fling” and directivity of strong ground motion, may result in significantly higher accelerations at the site.

9.2. Landsliding

The site is not located in a Landslide Hazard Zone on the State of California Seismic Hazard Zones Map (Figure A-6, Appendix A). No evidence for landsliding was observed on or in the immediate vicinity of the site. Therefore, due to the lack of significant topographic variations at the project site, landsliding is not a potential problem on the site.

9.3. Liquefaction

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) due to increased pore water pressures induced by

strong, cyclic ground motions during an earthquake. When the pore water pressure is equal to or exceeds the overburden pressure, liquefaction of the affected soil layers occurs. For liquefaction to occur, three conditions are required:

- Ground shaking of sufficient magnitude and duration;
- Groundwater level at or above the level of the susceptible soils during the ground shaking; and
- Soils that are susceptible to liquefaction.

The Liquefaction Hazard zone on the State of California Seismic Hazards Zones Map (Figure A-6, Appendix A) indicates that the site is located in a generalized liquefaction susceptibility zone (CDMG, 2002). Because of the depth of historic groundwater and the soil types encountered during our investigation, the potential for liquefaction at the site is high.

Liquefaction hazard analyses were performed using the computer program HYAT2008, which is based on the updated method of analysis as presented in Monograph MNO 12 (Idriss and Boulanger 2008) published by the Engineering Research Institute (EERI). The analyses with the CPT data were also checked using the Cliq software program developed by GeoLogismiki in collaboration with Gregg Drilling & Testing Inc. and Professor Peter Robertson. The computer program HYAT2008 uses either SPT or CPT data and is capable of screening non-liquefiable plastic soils, analyzing liquefaction triggering versus depth, and computing the lateral index and liquefaction-induced settlements. Liquefaction triggering resistance for CPT data is computed using the relationship by Idriss and Boulanger (2004). Post liquefaction reconsolidation settlements were computed using volumetric strain charts provided by Ishihara and Yoshimine (1992) and Idriss and Boulanger.

We evaluated the liquefaction potential at the site using the CPT and SPT data. CPTs were used primarily because they provide a continuous measurement of the site stratigraphy. We used an earthquake magnitude of 7.2 along with a site acceleration of 0.66g and a historic high groundwater level of 8 feet below the ground surface. The seismic settlement

calculations were performed for the CPTs to a depth of 60 feet. Based on the boring and CPT data and our engineering analyses, some layers of loose to medium dense sandy silt, silty sand, and sand below the groundwater are subject to liquefaction in the event of a major earthquake occurring on a nearby fault. The calculated liquefaction is in the order of 4 to 6 inches to a depth of 60 feet.

To calculate the dry settlement, we used the methods proposed by Tokimatsu and Seed (1987), Pradel (1998) and other methods recently published. These dry settlement calculation methods utilize the standard penetration test (SPT) blow count or CPT data to estimate the amount of volumetric compaction or settlement during an earthquake. The dry settlements calculated for the CPT and borings are generally in the range of ¼ inch to ½ inch. The seismic settlement profiles for the CPTs are included in Appendix E.

9.4. Lateral Spreading

The site and the surrounding areas are relatively flat with no significant descending slopes. Due to the relatively flat ground, the potential for lateral spreading is considered low.

9.5. Tsunamis and Seiche

The site is located at an average mean sea level (AMSL) elevation of approximately 40 to 45 feet, and there are no enclosed large bodies of water in the immediate vicinity of the property. The site is located outside the area mapped as subject to Tsunami/Seiche as delineated in the City of Oxnard General Plan, Seismic/Flooding and Tsunami/Seiche Potential Map. Therefore, tsunamis and seiche are not considered to be potential hazards to the site.

10. FLOODING

The site does not lie within a 100-year flood zone area or in a dam inundation area as shown on the FEMA Flood Map. The site is in an area of 0.2% annual chance of flooding or 1% annual chance flood with average depths of less than one foot. The Flood Map (Figure A-7) in Appendix A depicts the flood zone.

11. OIL WELLS AND OTHER HAZARDS

The State of California Department of Conservation does not report any oil well on site. The nearest known oil well was drilled about 1,300 feet south of the site. According to the available records this well was a dry hole. The nearest plugged well is located approximately ½ mile southwest of the site. The nearest active oil well reported is located about 1 mile to the northwest of the site as shown on the DOGGR Map, Figure A-8. Based on these dry wells and the distance from active wells, no hazardous materials associated with oil fields are expected.

Land subsidence is the sinking or gradual lowering of the earth surface. Man-made causes of land subsidence most often include groundwater pumping, mining, oil and gas production and river channelization. Based on the City of Oxnard General Plan, Seismic/Geologic Hazard map, there is some land subsidence occurring at about 0.05 feet per year in the general area, including most of the City of Oxnard.

12. SOIL EXPANSION POTENTIAL

The upper fill and alluvial soils are generally cohesive in nature (clay or silt with various amounts of fine sand). One test indicated an expansion index of 38. The clayey soil tested is considered to have a low expansion potential (EI ranges between 20 and 50). The consolidation tests did not indicate significant expansion upon wetting due to their relatively high in situ degree of saturation. Due to the nature of the deposits, medium expansive soils should also be expected in some areas of the site. Further evaluation of the expansion potential should be performed during subsequent subsurface investigation.

13. SOIL HYDROCONSOLIDATION POTENTIAL

Soils susceptible to hydroconsolidation will reduce in volume upon wetting from water. Naturally occurring soils that are susceptible to hydroconsolidation are generally porous with a structure of clay and silt particles held together by soluble salts or/and have a low

moisture content. Based on the samples obtained during the field exploration, the soils are generally non porous and have moisture contents above optimum.

The potential for hydroconsolidation has been evaluated based on the consolidation test results and soil moisture contents. The consolidation results do not indicate significant settlement upon addition of water. Based on the consolidation test results, the in situ moisture contents, and the dry unit weights of the soils measured in the laboratory to date, we consider the alluvium to have a low potential for hydroconsolidation. The upper soils should be recompacted to prevent hydroconsolidation near the ground surface. Further evaluation of the hydroconsolidation potential should be performed during a subsequent subsurface investigation.

14. CONCLUSIONS AND RECOMMENDATIONS

14.1. General

In our opinion, the proposed development is feasible from a geotechnical engineering point of view. However; special consideration needs to be given to foundation support due to the potential for seismic settlement.

The following sections contain a preliminary geotechnical evaluation for the design and construction of the subject improvements and include discussions about bearing capacity, settlement, flatworks, slabs-on-grade, temporary excavations, and utility trenches.

14.2. Earthwork

14.2.1 Site Preparation

All environmentally undesirable materials, surficial vegetation, deleterious, organic, and oversized materials (greater than 4-inches in maximum dimension), and demolition debris should be stripped from the development areas and exported or stockpiled away from the work area. Areas to receive fill should be stripped of all dry, loose or soft earth materials

and undocumented fill materials to the satisfaction of the Geotechnical Engineer. We recommend removing all existing utilities and other improvements to be abandoned.

14.2.2. Building Pads

Any existing abandoned underground utilities, organic material and other debris should be removed from the proposed building areas. The onsite shallow soils are generally not suitable to support the proposed improvements without overexcavation and recompaction. The depth of overexcavation will depend upon the ground improvement method selected. As a minimum, we recommend overexcavating the subgrade at least 4 feet below existing and proposed grades, whichever is deeper. The overexcavation should extend laterally at least 5 feet or the depth of the excavation beyond the building foundation perimeters, whichever is greater. Where the overexcavation cannot be extended to the full extent laterally, as recommended, due to existing facilities, property lines and easement, the overexcavation should be extended vertically by an additional one to two feet depending upon subsurface and site conditions observed. All existing fill should be overexcavated and replaced as new engineered fill.

Due to the soil expansion potential, for preliminary cost estimate, we recommend that the upper two feet of backfill below the footings and slabs consist of non-expansive soils. The bottom of the removal excavation should be scarified to 8 inches, moisture conditioned and recompacted to at least 92% relative compaction as determined by ASTM D1557. All sands and other granular fill placed below building pads and foundations should be compacted to at least 95% relative compaction at moisture content within 2½ percent of optimum unless approved otherwise by the Geotechnical Consultant at the time of construction. All sandy silt and clay should be compacted to at least 92% relative compaction at moisture content above optimum for the silt and 2 percent above optimum for the clay unless determined otherwise at the time of construction by the Geotechnical Engineer due to “pumping conditions”.

14.2.3. Subgrade for Exterior Flatwork

For exterior flatwork for pedestrian access, we recommend the placement of at least 18 inches of non-expansive granular material. The same moisture conditioning and compaction as recommended for the building pads apply. The minimum thickness of new fill below the

pedestrian walkway should be 2½ feet. The overexcavation below the existing grade in these areas should be at least 2½ feet. Prior to fill placement, the subgrade should be scarified to 8 inches, moisture conditioned and recompacted to 90% relative compaction.

Exterior concrete slabs for pedestrian traffic or landscape should be at least four inches thick. If there are areas where maintenance carts will be used or where heavy furniture or other supplies will be repeatedly moved with dollies, the placement of 3 to 4 inches of aggregate base compacted to 95% relative compaction is advisable to prolong the life of the walkway. Weakened plane joints should be located at intervals of no more than about 6 feet. The need for reinforcement in exterior flatwork should be evaluated, as necessary, on a site-specific basis following grading or the site design.

14.2.4. Subgrade for Pavement

We recommend overexcavating the subgrade at least 2½ feet below the existing grade and 2½ feet below the proposed aggregate base, whichever is greater. The subgrade should then be checked for moisture content. Onsite clayey soils may be used as backfill below the pavement up to the design subgrade provided proper moisture conditioning is achieved. For pavement subgrade, all clayey soils should be placed in about 6-inch thick loose lifts and compacted to at least 2 percent above optimum at 90 percent relative compaction. “Pumping pavement subgrade” should not be accepted.

14.3. General Grading Requirements

1. All clayey soil fills, unless otherwise specifically stated in the report, should be compacted to at least 90 percent of the maximum dry density as determined by ASTM D1557 Method of Soil Compaction. All sand and other granular fill below building pads should be compacted to at least 95% relative compaction unless indicated otherwise.
2. No fill should be placed until the area to receive the fill has been adequately prepared and approved by the Geotechnical Consultant.
3. Fill soils should be kept free of debris and organic material.

4. Rocks or hard fragments larger than 3 inches may not be placed in the fill without approval of the Geotechnical Consultant or his representative, and in a manner specified for each occurrence.
5. The fill material should be placed in lifts which, when loose, should not exceed 8 inches per lift. Each lift should be spread evenly and should be thoroughly mixed during the spreading to obtain uniformity of material and moisture.
6. When the moisture content of the fill material is too low to obtain adequate compaction, water should be added and thoroughly dispersed until the soil has a moisture within $2\frac{1}{2}$ percent of optimum moisture content for granular soils, above optimum for silt and 2 percent above optimum for clayey soils unless indicated otherwise by the Geotechnical Engineer at the time of construction. The fill should be considered as “failing” if the specified moisture requirements are not met. Any vacated fill should be moisture reconditioned prior to placement of additional fill.
7. When the moisture content of the fill material is too high to obtain adequate compaction, the fill material should be aerated by blading or other satisfactory methods until the soil has a moisture content as specified herein.
8. Permanent fill and cut slopes should not be constructed at gradients steeper than 2.5:1(H:V). Due to shallow groundwater and liquefaction potential, the slopes should be kept at a height below 5 feet unless approved otherwise by the geotechnical consultant.

It should be noted that the onsite shallow soils consist generally of silt, clay and silty sand that may be subject to “pumping” (deflection) at moisture content slightly above optimum. Based on our plasticity index tests and expansion index test, the optimum moisture of some of the clayey soils is on the order of 12 to 15 percent; the optimum moisture for the various mixtures

of sand and silt will be lower. Our laboratory moisture content test results are predominantly in the range of 18 to 31 percent with an average of about 24 percent. Some of these soils are considered to have moisture content in the range of 10 to 15 percent above optimum. Drying back these soils during grading and utility trench backfill will be required to achieve compaction. When weather and/or time does not allow drying back the excavation bottoms, “bridging” of bottom excavations for exterior flatwork may be performed by overexcavating some of the moist/wet soils and backfilling with ¾-inch crushed rock wrapped with geosynthetics.

“Bridging” of disturbed soils should not be allowed below building pads. Any disturbed soils should be removed from beneath the buildings. The contractor will have to select appropriate excavation and compaction equipment to avoid disturbing the subgrade and to be able to compact the fill to the project specifications above a relatively soft subgrade. Track-mounted excavators, tracked backhoes, and appropriate towed non-vibratory sheepsfoot combined with very thin backfill lifts should be used as necessary to reduce subgrade disturbance.

14.4. Fill Materials

14.4.1. Onsite Materials and Shrinkage

The shallow onsite soils appear to be predominantly mixtures of silt, clay and fine sand. Due to the use of fertilizer for agricultural purpose, environmental sampling and testing should be performed to determine the concentrations of herbicide and pesticide. If the concentrations of pesticide and herbicide are low and no debris and organic material are present, the material should be suitable as general fill where expansive soils are allowed such as within the vehicular pavement areas, landscape and below the non-expansive backfill zone below walkways and buildings.

Overexcavation and re-compaction will induce fill shrinkage. Many factors such as mixing, relative compaction of the fill, and topographic approximations will affect shrinkage. We cannot estimate the exact amount of shrinkage; however, in our opinion, the shrinkage may be on the order of 12 to 20 percent. In addition, 0.1 foot of subsidence should be considered. This subsidence will occur during grading.

14.4.2. Import

Import materials should contain sufficient fines (binder material) so as to be relatively impermeable and result in a stable subgrade when compacted. The imported materials should have an expansion index (EI) less than 20 and should be free of organic materials, debris, and cobbles larger than 3 inches, with no more than 10 percent of the materials being larger than 2 inches in size and no more than 35% passing the # 200 sieve. A bulk sample of potential import material, weighing at least 30 pounds, should be submitted to the Geotechnical Consultant at least 48 hours before fill operations. All proposed import materials should be approved by the Geotechnical Consultant prior to being placed at the site. All import soils should be tested for corrosivity potential if used within the proximity of structures or metallic piping. The soils should be cleared of environmental contamination prior to importing on site.

14.5. Temporary Excavations

The shallow undisturbed site soils are expected to be temporarily stable when excavated vertically to a depth of 4½ feet. For deeper excavations up to a depth of 8 feet, we recommend cut slope gradients no steeper than ¾H:1V unless shoring is used. For excavations between 8 and 12 feet, slope ratios no steeper than 1H:1V should be used. Sloughing and slumping of the excavation slope surface should be anticipated.

The top of slopes should be barricaded to prevent vehicles and storage loads within 6 feet of the tops of the slopes. A greater setback may be necessary when considering heavy vehicles such as concrete trucks and cranes; the Geotechnical Engineer should be advised of such heavy vehicle loadings so that specific setback requirements can be established.

When excavating adjacent to existing footings or building supports, proper means should be employed to prevent any possible damage to the existing structures. Un-shored excavations should not extend below a 1:1 (H:V) plane extending downward from the lower edge of adjacent footings and should start at least three feet away from the footing. Where there is insufficient space to slope back an excavation, shoring or sequential excavation (slot cut) will be required. All regulations of State or Federal OSHA should be followed.

Temporary excavations are assumed to be those that will remain un-shored for a period of time not exceeding one week. In dry weather, the excavation slopes should be kept moist, but not soaked. If excavations are made during the rainy season (normally from November through April), particular care should be taken to protect slopes against erosion. Mitigative measures, such as installation of berms, plastic sheeting, or other devices, may be warranted to prevent surface water from flowing over or ponding at the top of excavations.

14.6. Floor Slabs

14.6.1. General

The grading recommendations for the new building floor slabs are provided in Section 14.2.1. It is recommended that the compacted subgrade be properly moistened prior to casting floor slabs.

14.6.2 Moisture Sensitive Floor Coverings

Water vapor transmitted through floor slabs is a common cause of floor covering problems. In areas where moisture-sensitive floor coverings (such as tile, hardwood floors, linoleum or carpeting) are planned, a vapor retarder should be installed below the concrete slab to reduce excess vapor transmission through the slab.

The function of the recommended impermeable membrane (vapor retarder) is to reduce the amount of soil moisture or water vapor that is transmitted through the floor slab. The membrane should be at least 10-mil thick, Class A, and care should be taken to preserve the continuity and integrity of the membrane beneath the floor slab. A 4-inch thick layer of free drainage gravel or coarse sand, with no more than 2 percent passing ASTM No. 200 sieve, is normally recommended to be placed below the vapor retarder to serve as a capillary break.

Another factor affecting vapor transmission through floor slabs is the water to cement ratio in the concrete used for the floor slab. A high water to cement ratio increases the porosity of the concrete, thereby facilitating the transmission of water vapor through the slab. The

project Structural Engineer should provide recommendations for design of concrete for foundations and floor slabs in accordance with the latest version of the applicable codes. The placement of sand above the vapor retarder is the purview of the Structural Engineer.

14.7. Seismic Coefficients

Under the Earthquake Design Regulations of Chapter 16, Section 1613 of the CBC 2013, and based on the mapped values, the coefficients and factors presented in the following table apply to the lateral-force design for the proposed new structures at the site. The mapped acceleration parameters were obtained from the USGS website using the latitude (N34.2066°) and longitude (W119.2077°), the site soil classification (alluvium), and the design code reference document (2010 ASCE 7). A response spectrum is presented on Figure A-9.

For New Structures Site Class (CBC 2013 – 1613A.5.2)	D
Seismic Design Category based on Occupancy Category III (CBC 2013-1604.5 & 1613.5.6)	E
Mapped Acceleration Parameter for Short Period (0.2 Second), S_S	2.485
Mapped Acceleration Parameter for 1.0 Second, S_1	0.912
Adjusted Maximum Spectral Response Parameter for Short Period (0.2 Second), S_{MS}	2.485
Adjusted Maximum Spectral Response Parameter for 1.0 Second Period, S_{M1}	1.368
Design Spectral Response Acceleration Parameter, S_{DS}	1.657
Design Spectral Response Acceleration Parameter, S_{D1}	0.912

14.8. Building Foundations

General: Special consideration needs to be given to foundation design due to the potential for significant ground shaking and settlement that may occur as a result of that ground shaking. The total seismic settlement is on the order of 4 to 6 inches. This level of settlement is deemed greater than generally acceptable in the industry for a structural solution. Ground improvement is, therefore, recommended.

The most common types of ground improvement to mitigate liquefaction include stone columns, compaction grouting, and deep soil cement mixing. These methods can be combined with mat foundations depending upon the site conditions. For this site, the use of stone columns with conventional spread footing foundations may be one of the less expensive mitigation measures.

Ground improvements are typically design-build projects and the specialty contractors are ultimately responsible for the performance of their designs since both the construction methods and designs affect the ultimate performance. For the areas recommended to be improved, the stone columns should be designed to limit the total seismic settlement to no more than one inch with differential settlement of less than $\frac{3}{4}$ inch within the upper 50 feet. The static settlement should be no greater than $\frac{1}{2}$ inch. In addition to the settlement criteria, the replacement ratio should not be less than 10 percent. The stone columns should not have a diameter less than 24 inches and the center to center spacing should not be greater than $8\frac{1}{2}$ feet.

The tips of stone columns should extend 50 feet below the existing ground surface. Because of the lack of lateral confinement, the top two feet of the stone columns will not be adequately compacted upon completion of the columns and will require overexcavation and recompaction. We recommend a minimum of $2\frac{1}{2}$ feet of overexcavation below the footing bottoms. The backfill for the overexcavation above the stone columns should consist of $\frac{3}{4}$ -inch crushed rock. The construction of stone columns will result in soil bulking that may require exporting or placement in other areas of the site.

For preliminary design purpose, we recommend 3-foot diameter stone columns at center spacing (rectangular pattern) not exceeding 7.5 feet or equilateral pattern not exceeding 8 feet on center. In addition, to balance the building column loads, DSA may require that 4 stone columns be installed under each isolated footings. Continuous footings may be used to circumvent this requirement for isolated footings.

Footings should have a minimum width of $2\frac{1}{2}$ feet for isolated footings and $1\frac{1}{2}$ feet for continuous footings. The bottom of footings should be located at least 24 inches below the

lowest adjacent finish grade. Due to soil expansion potential, the footing reinforcement should consist of a minimum of 3 No. 5 bars, top and bottom or equivalent as determined by the structural engineer.

The proposed structures may be supported on isolated and/or continuous footings designed using a net allowable bearing pressure of 2,000 pounds per square foot (psf). A one-third increase in the bearing value may be used when considering wind or seismic loads.

The design-build contractor will adjust the diameter and spacing within the limits provided to meet the settlement design criteria based on the anticipated subsurface conditions and their methods of construction. A stone column testing program, including load tests and verification CPTs and test borings with SPTs is recommended. The number of tests, locations, and depths recommended will be presented in the performance specifications.

Lateral Extension of Stone Columns: The stone columns should extend approximately 20 feet beyond the building footprints per Special Publication 117. At least two rows of columns should be installed outside the building perimeters. At some locations, the space may be limited due to property lines and/or utility easement. In these locations, the stone column rows can be brought closer together to fit within the available space.

Continuous Footings: Footings are anticipated to be used for screen walls and other minor structures where seismic settlement is not a major concern. Footings should have a minimum width of 2 feet for isolated footings and 1½ feet for continuous footings. The bottom of footings should be located at least 24 inches below the lowest adjacent finish grade.

For lightly loaded structures such as screen/fence walls, the overexcavation below footings should be at least 18 inches. A net allowable bearing pressure of 1200 psf may be used. A one-third increase in this value may be used when considering wind or seismic loads.

Lateral Resistance: Lateral load resistance may be derived from passive resistance along the vertical sides of the foundations, friction acting at the base of the foundations, or a

combination of the two. A coefficient of friction of 0.35 may be used between the footings, floor slabs, and the supporting soils comprised of compacted granular earth materials. The passive resistance of level properly compacted fill soils in direct contact with the footings may be assumed to be equal to the pressure developed by a fluid with a density of 250 pcf, to a maximum pressure of 2,000 psf.

A one-third increase in the passive value may be used for wind or seismic loads. The frictional and passive resistances of the soils may be combined. Due to the low bearing pressure, the passive resistance does not need to be reduced by one-third. We recommend that the first foot of soil cover be neglected in the passive resistance calculations if the ground surface is not protected from erosion or disturbance by a slab, pavement or in a similar manner.

Estimated Settlement for Footings: Based on the results of our analyses and provided that our recommendations in the preceding sections of this report are followed, we estimate that the total static settlement of isolated and/or continuous footings under sustained loads would be on the order of ½ inch for the anticipated structural loads indicated in this report. The seismic settlements for footings are anticipated to be on the order of ¾ inches where stone columns are constructed. Where no stone columns are constructed, the seismic settlement is anticipated to exceed 4 inches.

14.9. Utility Trench Backfill

A minimum of 4-inch thick bedding material should be placed below the bottom of the utility lines, on a firm and unyielding subgrade. Bedding material should extend 12 inches above the lines. Bedding material should consist of either sand, fine-grained gravel, or sand-cement slurry to support and/or to protect the lines. The bedding material should meet the specifications provided in the latest edition of the “Standard Specifications for Public Works Construction” (Greenbook). Sand or gravel should be compacted in accordance with the Greenbook specifications.

The upper two feet of trench backfill below the buildings and the upper 18 inches below exterior flatwork should consist of non-expansive granular material and/or sand. The

backfill should be mechanically compacted to at least 90% of the maximum dry density of the soils except for buildings where 95% is required. Below pavements, a minimum relative compaction of 95% is required in the upper one foot of the backfill. For utility trenches within the buildings, the backfill should be compacted to the minimum required relative compaction indicated under the “Grading” section of this report. The material should be observed, tested and approved by the Geotechnical Consultant. The trench backfill materials should be placed in accordance with Sections 306-1.2.1 and 306-1.3 of the “Standard Specifications for Public Works Construction” (Greenbook).

When adjacent to a conventional footing, utility trenches and pipes should be laid above an imaginary line measured at a gradient of 1:1 (H:V) projected down from 12 inches above the bottom edges of any footings. Otherwise, the pipe should be designed to accept the lateral effect from the footing load, or the footing bottom should be deepened as needed to comply with this requirement. Backfill consisting of 2-sack sand cement slurry may also be used.

Due to the anticipated site seismic settlement, flexible utility connections to the buildings should be considered, including smaller diameter pipes enclosed in casings that will allow some movement without stressing the pipes. Automatic shut off valves should also be considered.

14.10. Drainage

Foundation, slabs, flatwork, and pavement performance depends greatly on proper drainage within and along the boundary of the development. Perimeter grades around the buildings should be sloped in a manner allowing water to drain away from the structures and not pond next to the foundations. Roof downdrains should be connected to underground pipes carrying water away from the building area or have extenders so water does not drain and pond next to the buildings. Per the 2013 CBC, landscape areas within 10 feet of buildings should slope away at gradients of at least 5 percent. Paved areas within 10 feet of buildings should slope away at gradients of at least 2 percent.

14.11. On Site Water Infiltration

At the time of our field exploration the types, locations and depths of the proposed Best Management Practices (BMPs) had not been finalized. Normally, percolation testing is performed about one foot below the invert of the BMPs. Since the historic groundwater is only about 8 feet below the existing ground surface, we performed percolation tests at depths of 3 to 4 and 4 to 5 feet below the existing ground surface. The locations of the three percolation tests are shown on the Boring Location Map, Figure A-2. It should be noted that many agencies prohibit infiltration when the historic high groundwater table is less than 10 feet below the bottom of the BMPs or require pre-filtering/treatment of the water prior to infiltration.

Borings were drilled and sampled at close intervals in the immediate vicinity of the percolation tests to determine the subsurface soil profile, which affects percolation. The subsurface conditions were found to be similar to the borings drilled in the vicinity of the proposed building locations. The soils were found to consist predominantly of fine grained materials such as sandy silt, sandy clay and fine silty sand.

Koury performed the tests in general conformance with the boring percolation test procedures of the County of Los Angeles as defined in County document GS200.1 dated June 1, 2011. The test procedures consisted of drilling 6-inch diameter boreholes to depths of about 3 and 5 feet below the existing ground surface, placing a 2-inch diameter perforated pipe in the hole and backfilling the annulus with clean gravel to avoid caving in the test zone. The procedure involved pre-soaking the percolation zone prior to testing. Following pre-soaking, percolation testing began by filling the bottom 2 to 3 feet with water and measuring the drop in water level at intervals of 30 minutes.

The percolation testing data was converted to infiltration rates as presented in Appendix D. The in-situ field percolation tests performed provide short-term infiltration rates, which apply mainly to the initiation of the infiltration process due to the short time of the test (minutes to hours instead of days) and the amount of water used. Where appropriate the short-term infiltration rates should be converted to long-

term infiltration rates using reduction factors ranging from 3 to 12 depending upon the degree of infiltrate quality, maintenance access and frequency, site variability, subsurface stratigraphy variation, hydraulic gradient, and other factors. The gradation tests indicate long term infiltration rate on the order of 0.2 in/hr.

The rate of infiltration is also a function of the hydraulic gradient that is reduced when there is a water table or low permeable layer closer than 20 feet from the bottom of the infiltration system. In this case, the groundwater level is about 12 feet below the bottom of the tests. Also, the small scale percolation testing cannot model the complexity of the effect of interbedded layers of different soil composition. Because of the shallow groundwater, the water to be disposed of will have to move horizontally and “mounding” of the water may reduce the percolation rate. In addition, the clay layers will reduce the infiltration substantially. Additional percolation tests should be performed once the BMP locations and depths have been determined.

Infiltration facilities should be kept at least 50 feet away or more from structures or foundations and 25 feet from property lines.

The site soils generally have a low to medium expansion potential and high moisture contents; the effects of storm water infiltration on soil expansion should be small. There is potential for minor settlement and heave of the pavement and other flatwork due to expansion and hydroconsolidation, and some maintenance should be anticipated in the vicinity of the infiltration facilities. The infiltration facilities should be designed to overflow to the storm drain in the event that the drainage capacity is exceeded or in case of future failure to infiltrate sufficiently. Utility pipelines should be located outside the infiltration facilities or special measures should be taken to prevent water from entering the bedding and shading materials placed around utilities.

No infiltration facility should be designed to infiltrate water into fill material except if coarse-grained clean sand and gravel are used as fill. Any construction method should prevent compaction of the area where infiltration is proposed. Any soil processing and

compaction may reduce the infiltration by factors ranging between 10 and 100. We recommend that the lower 18 inches of the excavations for infiltration facilities be performed using an excavator; no rubber tire equipment should be allowed at the bottom of the excavations. No disturbance to the bottom of the excavations should be allowed. If silty or clayey fill is encountered at the bottom of the excavations, it should be removed and replaced with coarse clean sand or crushed rock. The proposed infiltration design system should be reviewed by the Geotechnical Consultant prior to construction.

14.12. Retaining Wall

Due to the potential for seismic settlement, the use of retaining walls should be avoided as much as possible except for small planter walls. Design earth pressures for retaining walls depend primarily on the allowable wall movement, wall inclination, type of backfill materials, backfill slopes, surcharges, and drainage. The earth pressures provided assume that a non-expansive backfill will be used and a drainage system will be installed behind the walls, so that external water pressure will not develop. If a drainage system is not installed, the wall should be designed to resist hydrostatic pressure in addition to the earth pressure. Determination of whether the active or at-rest condition is appropriate for design will depend on the flexibility of the walls. Walls that are free to rotate at least 0.002 radians (deflection at the top of the wall of at least $0.002 \times H$, where H is the unbalanced wall height) may be designed for the active condition. Walls that are not capable of this movement should be assumed rigid and designed for the at-rest condition. The recommended active and at-rest earth pressures are provided in the following table.

**Earth Pressures for Retaining Walls
(Non-Expansive Backfill)**

Wall movement	Backfill Condition	Equivalent Fluid Pressure (pcf)
Free to Deflect (active condition)	Level	40
Restrained (at-rest condition)	Level	60

The above lateral earth pressures do not include the effects of surcharges (e.g., traffic, footings), compaction, or truck-induced wall pressures. Any surcharge (live, including traffic, or dead load) located within a 1:1 plane drawn upward from the base of the

excavation should be added to the lateral earth pressures. The lateral contribution of a uniform surcharge load located immediately behind walls may be calculated by multiplying the surcharge by 0.33 for cantilevered walls and 0.5 for restrained walls. Walls adjacent to areas subject to vehicular traffic should be designed for a 2-foot equivalent soil surcharge (240 psf).

Care must be taken during the compaction operation not to overstress the wall. Wall backfill should be compacted to a least 90 percent relative compaction; however, heavy construction equipment should be maintained at a distance of at least 3 feet away from the walls while the backfill soils are being placed.

Walls should be waterproofed, and properly drained or designed to resist hydrostatic pressures. Except for the upper 18 inches, the backfill immediately behind retaining walls (minimum horizontal distance of 2 feet measured perpendicular to the wall) should consist of free-draining $\frac{3}{4}$ -inch crushed rock wrapped with filter fabric. The upper 18 inches of cover backfill should consist of relatively impervious material. Four inch diameter perforated PVC pipes, placed perforations down at the bottom of the rock layer leading to a suitable gravity outlet, should be installed at the base of the walls.

14.13. Asphalt Concrete (AC) Pavement

The required pavement structural sections depend on the expected wheel loads, volume of traffic, and subgrade soils. An R-value of 10 was used for preliminary pavement design assuming a clayey soil pavement subgrade.

The following pavement sections were calculated based on assumed traffic indices of 4 through 7. The project Civil Engineer should determine the traffic index to be used for different areas of the site.

Traffic Index	Asphalt Thickness (Inches)	Base Course (CAB) Thickness
4	3.0	6.0
4.5	3.0	8.0

5	3.0	9.0
5.5	3.0	11.0
6	3.5	12.0
6.5	4.0	13.0
7.0	4.0	15.0

Base course material should consist of Crushed Aggregate Base (CAB) as defined by Section 200-2.2 of the Standard Specifications for Public Works Construction (“Greenbook”). Base course should be compacted to at least 95 percent of the maximum dry density of that material. The base should be underlain by at least 2½ feet of engineered fill. The engineered fill should extend at least 3 feet beyond the edge of the pavement. See Earthwork section for grading recommendations.

In order to increase pavement performance and extend the pavement life, concrete curbs and gutters could be deepened to extend below the base course material and be seated in the compacted subgrade. Priority should be given to areas where heavier traffic is anticipated and where irrigation may be greater. The intent of deepening the curbs and gutters is to form a “cut-off” wall to reduce the amount of water flow through the base course material from adjacent landscaped areas. Subgrade soils, which become soaked as a result of water flowing through base course material, can reduce the life of the pavement and cause heaving of the pavement. The curbs should be deepened to an elevation of at least 6 inches below the bottom level of the proposed base course section.

14.14. Portland Cement Concrete (PCC) Pavement

The grading recommendations for vehicular PCC pavement are provided in Section 14.2.2 of this report. Base course material, used in the pavement sections, should consist of Crushed Aggregate Base (CAB) as defined by Section 200-2.2, respectively, of the Standard Specifications for Public Works Construction (Greenbook 2012). The aggregate base course should be compacted to at least 95% of the maximum dry density of that material.

The recommendations presented herein should be used for design and construction of the slabs and pertaining grading work underlying the pavement area. A minimum modulus of rupture of 550 psi for concrete has been assumed in designing of the PCC pavement sections; this corresponds to a concrete compressive strength of approximately 4,000 psi at 28 days. A qualified design professional should specify where heavy duty and standard duty concrete pavement slabs are used based on the anticipated type and frequency of traffic.

A weighted design k-value of 150 pounds per cubic inch (pci) was used assuming 6 inches of compacted Class II CAB material is placed over the compacted subgrade, as recommended. The recommended PCC pavement sections are provided in the following table:

PCC Pavement Sections

Pavement Type	Portland Cement Concrete Thickness (inches)	Base Course (CAB) Thickness (inches)
Light Duty	6.0	6.0
Heavy Duty	7.5	6.0

The following recommendations should also be incorporated into the design and construction of PCC pavement section:

- The pavement sections should be reinforced with No. 3 rebars spaced at 18 inches on centers each way to reduce the potential for shrinkage cracking.
- Joint spacing in feet should not exceed twice the slab thickness in inches, e.g., 12 feet for a 6-inch slab thickness. Regardless of slab thickness, joint spacing should not exceed 15 feet.
- Layout joints should form square panels. When this is not practical, rectangular panels can be used if the long dimension is no more than 1½ times the short one.
- Control joints should have a depth of at least 1/4 the slab thickness, e.g., 1 inch for a 4-inch slab.

- Pavement section design assumes that proper maintenance such as sealing and repair of localized distress will be performed on a periodic basis.

The PCC pavement material should conform to Section 201 of the Greenbook and the pavement should be constructed in accordance with Section 302-6 of the Greenbook.

15. SOIL CORROSIVITY

The corrosion potential of the on-site materials to steel and buried concrete was preliminarily evaluated. Laboratory testing was performed on selected soil samples to evaluate pH, minimum resistivity, chloride and soluble sulfate content. The test results are presented in the following table.

Corrosion Test Results

Boring	Depth (ft)	Minimum Resistivity (ohm-cm)	pH	Soluble Sulfate Content (ppm)	Soluble Chloride Content (ppm)
B-2	2	1540	7.9	384	48
P-1	4	-	-	8180	-

These tests are only an indicator of soil corrosivity for the samples tested. Other soils found on site may be more, less, or of a similar corrosive nature. Imported fill materials should be tested to confirm that their corrosion potential is not more severe than those tested. Based on the minimum resistivity results from the soil tested, some of the near-surface site soils may be considered to have a high corrosion potential towards buried ferrous metals. The concentrations of soluble sulfates indicate that the potential of sulfate attack on concrete in contact with the on-site soils is low for the soil from Boring B-2 and very high for Boring P-1, based on ACI 318 Table 4.3.1. Cement Type IV are recommended for concrete in contact with soils. Low water-cement ratios (maximum 0.45) with high concrete strength (minimum 4,500 psi) should be used for concrete in contact with onsite soils in order to mitigate concrete deterioration. Further interpretation of the

corrosivity test results, including the resistivity value, and providing corrosion design and construction recommendations are the purview of corrosion specialists/consultants.

16. ADDITIONAL EXPLORATION AND TESTING

This report has been prepared for a preliminary determination of soil conditions and geologic hazard to determine some of the site constraint from a geotechnical standpoint. This report should not be considered a design level study. Additional field exploration, laboratory testing and engineering analysis should be performed for the design level study.

17. CLOSURE

The findings and recommendations presented in this report were based on the results of our field and laboratory investigations, combined with professional engineering experience and judgment. Variations of soil conditions between borings should be anticipated. The report was prepared in accordance with generally accepted engineering principles and practice. We make no other warranty, either express or implied.

Should you have any questions concerning this submittal, or the recommendations contained herewith, please do not hesitate to call our office.

Respectfully submitted,

KOURY GEOTECHNICAL SERVICES, INC.


Jacques B. Roy P.E. G.E.

Principal Geotechnical Engineer




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Principal Engineering Geologist



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APPENDICES

Appendix A: Maps and Plans

Vicinity Map - Figure A-1
Boring Location Plan - Figure A-2
Historic High Groundwater – Figure A-3
Geology Map – Figure A-4
Fault Map – Figure A-5
Seismic Hazard Zone Map – Figure A-6
Flood Map – Figure A-7
Oil Wells Map – Figure A-8
Response Spectrum – Figure A-9

Appendix B: Boring and CPT Logs

Legend
Borings B-1 through B-3
Borings P-1 through P-3
CPT Reports

Appendix C: Laboratory Test Results

Appendix D: Percolation Test Results

Appendix E: Seismic Settlement Calculations

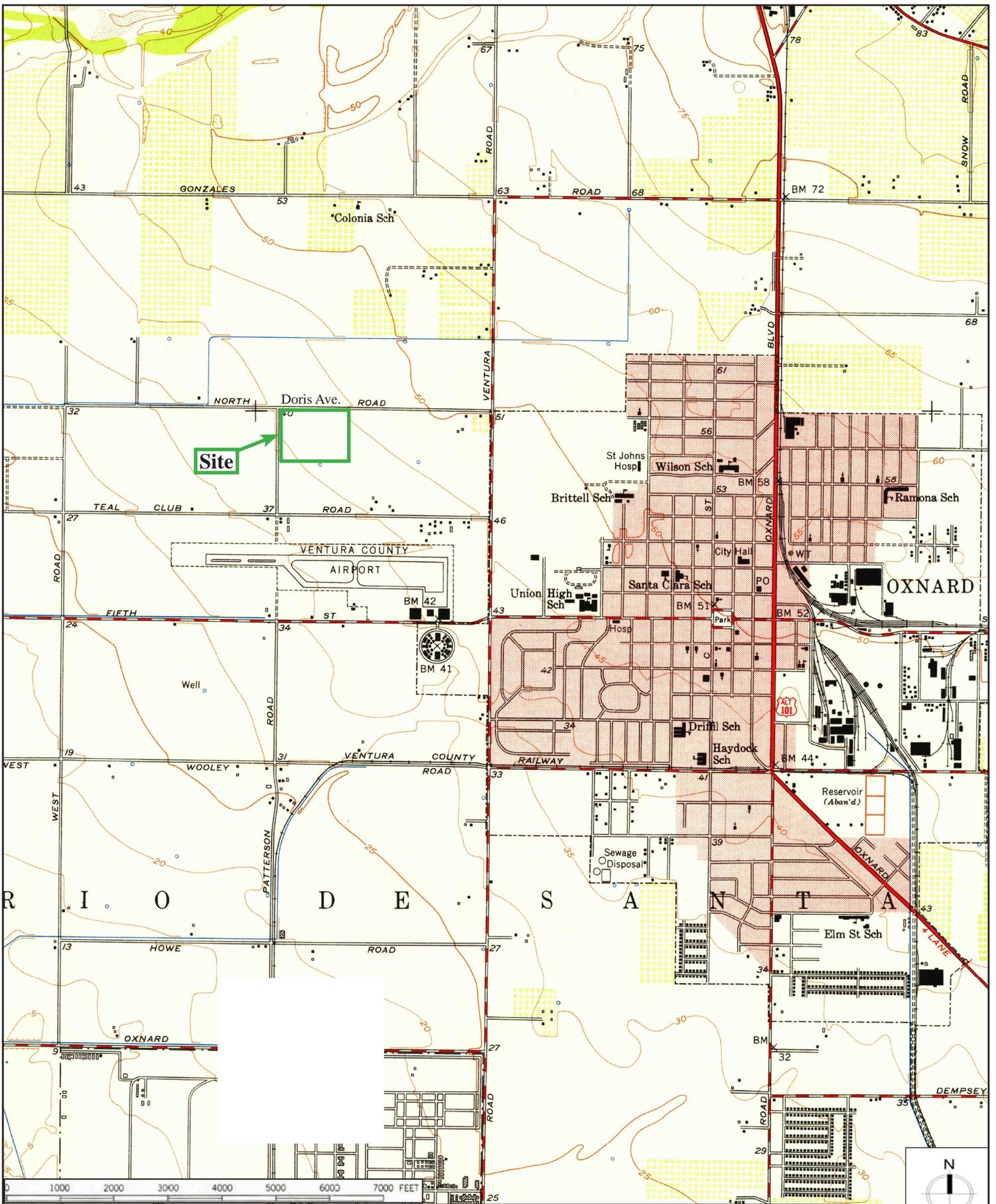
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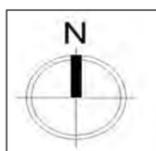
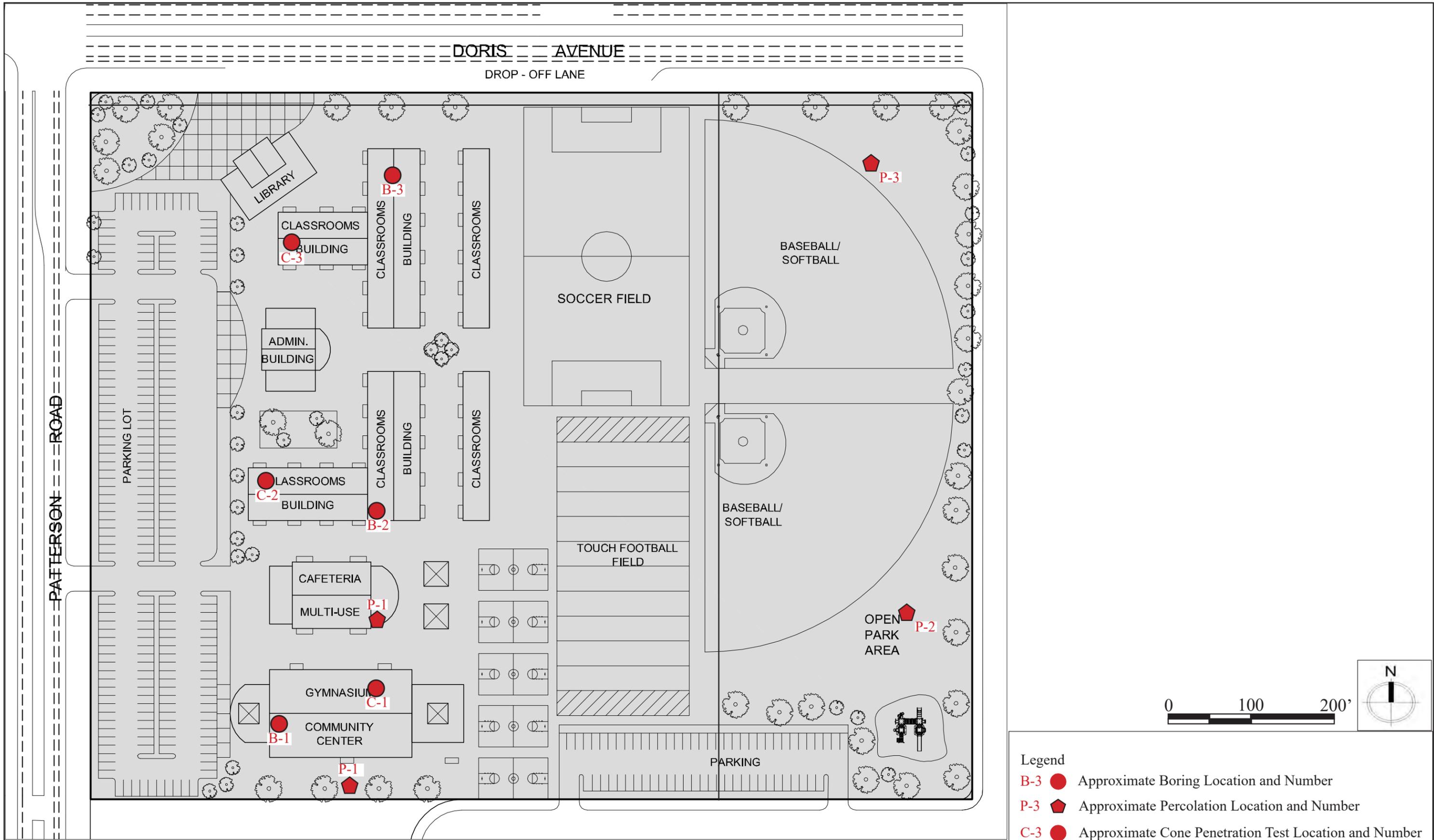
APPENDIX A

MAPS AND PLANS

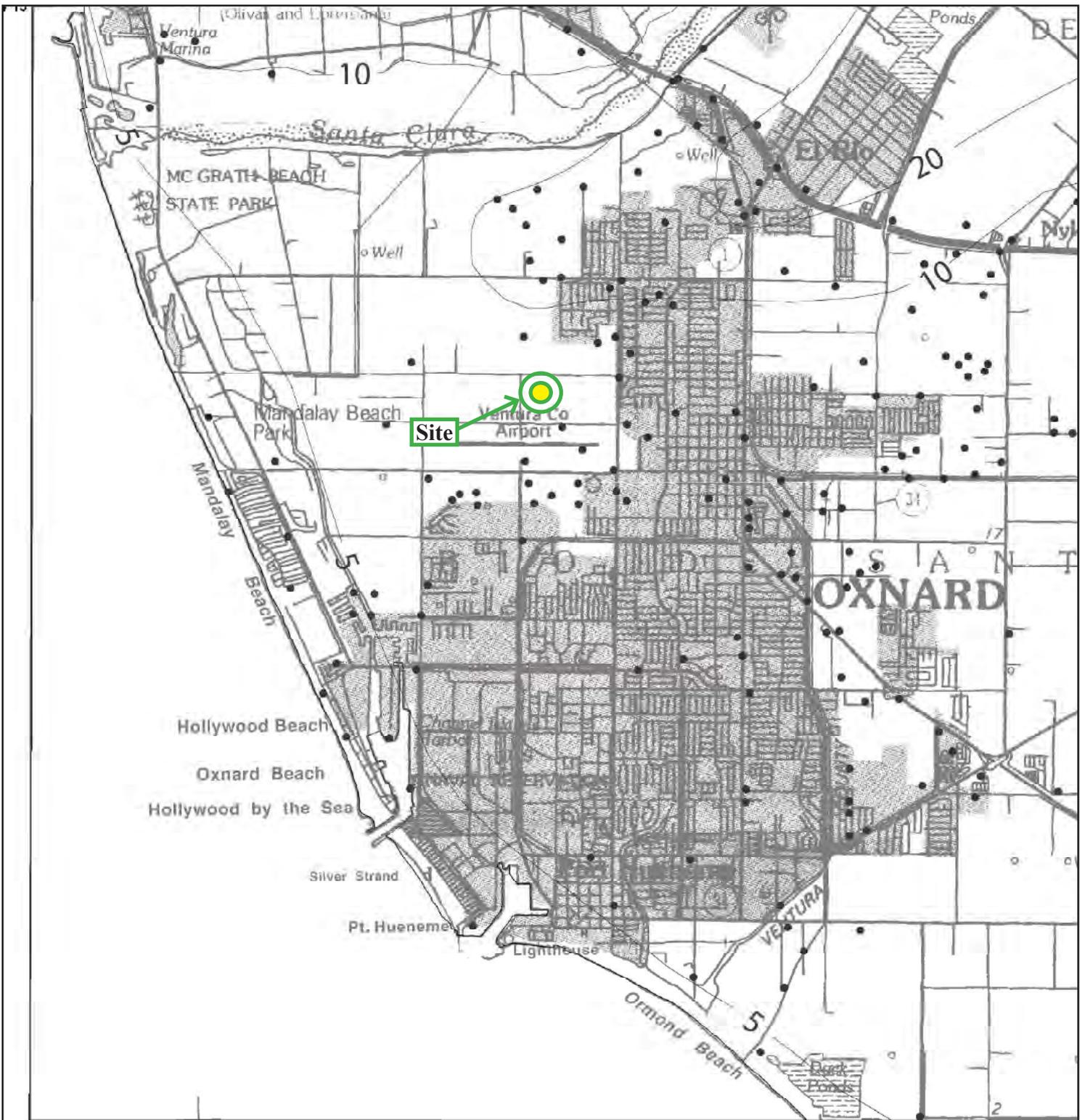


Reference: USGS Topographic Map, Oxnard Quadrangle - Ventura County, 7.5 Minutes Series, California, 1949

	<p>Project Name Teal Club Middle School Academy Oxnard, California</p>	<p>Project No. 13-0637 Date January 2014</p>	<p>Drawing Title Vicinity Map</p>	<p>Figure A-1</p>
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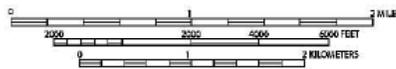
Legend	
B-3	● Approximate Boring Location and Number
P-3	⬠ Approximate Percolation Location and Number
C-3	● Approximate Cone Penetration Test Location and Number



Base map enlarged from U.S.G.S. 30 x 60-minute series

OXNARD QUADRANGLE

SCALE

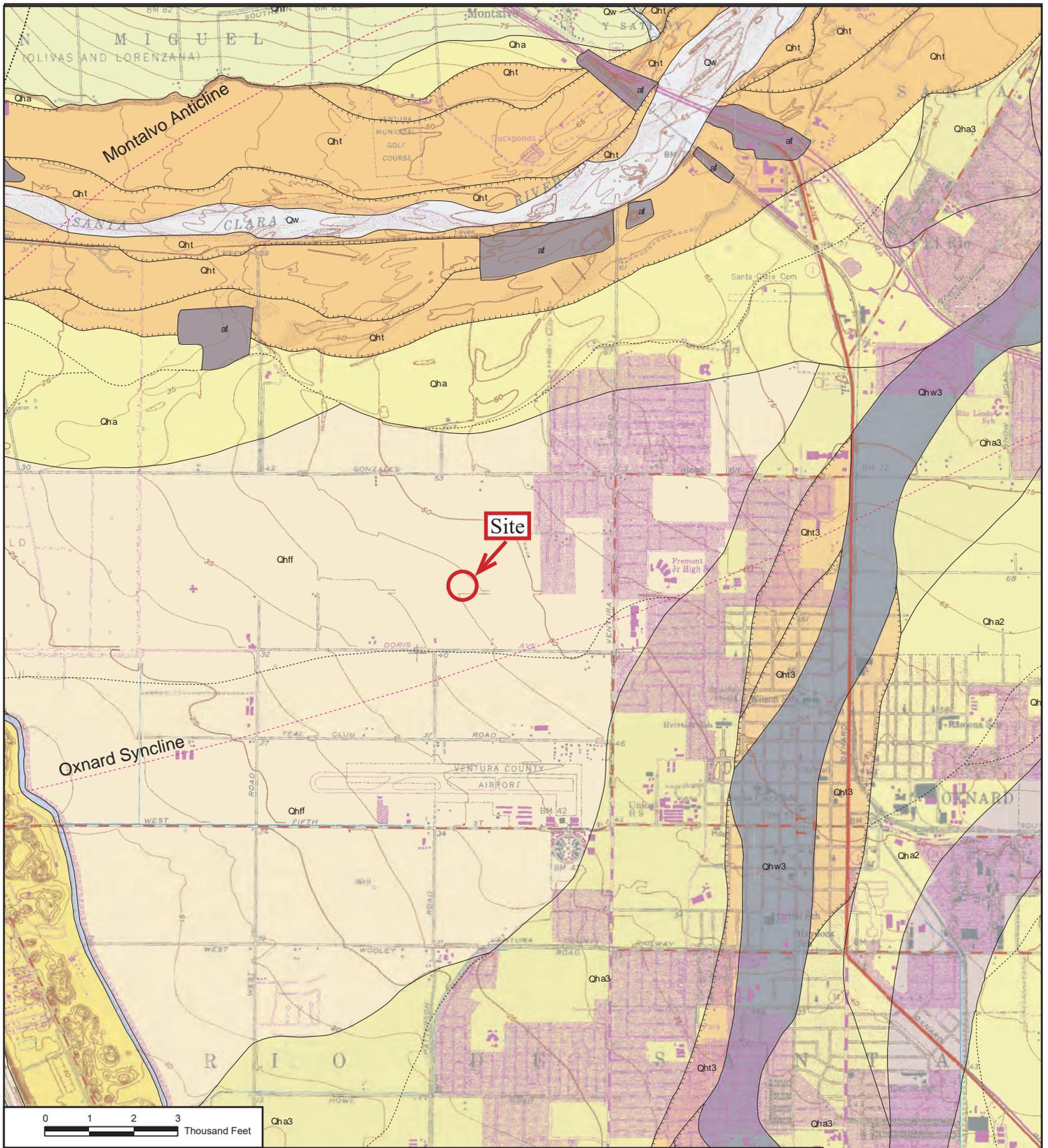


30 — Depth to ground water in feet

● Borehole Site

Reference: USGS, Oxnard 7.5-minute Quadrangle, California, Plate 1.2, Seismic HAZARD ZONE REPORT 052

	<p>Project Name Teal Club Middle School Academy Oxnard, California</p>	<p>Project No. 13-0637 Date January 2014</p>	<p>Drawing Title Historic High Groundwater Map</p>	<p>Figure A-3</p>
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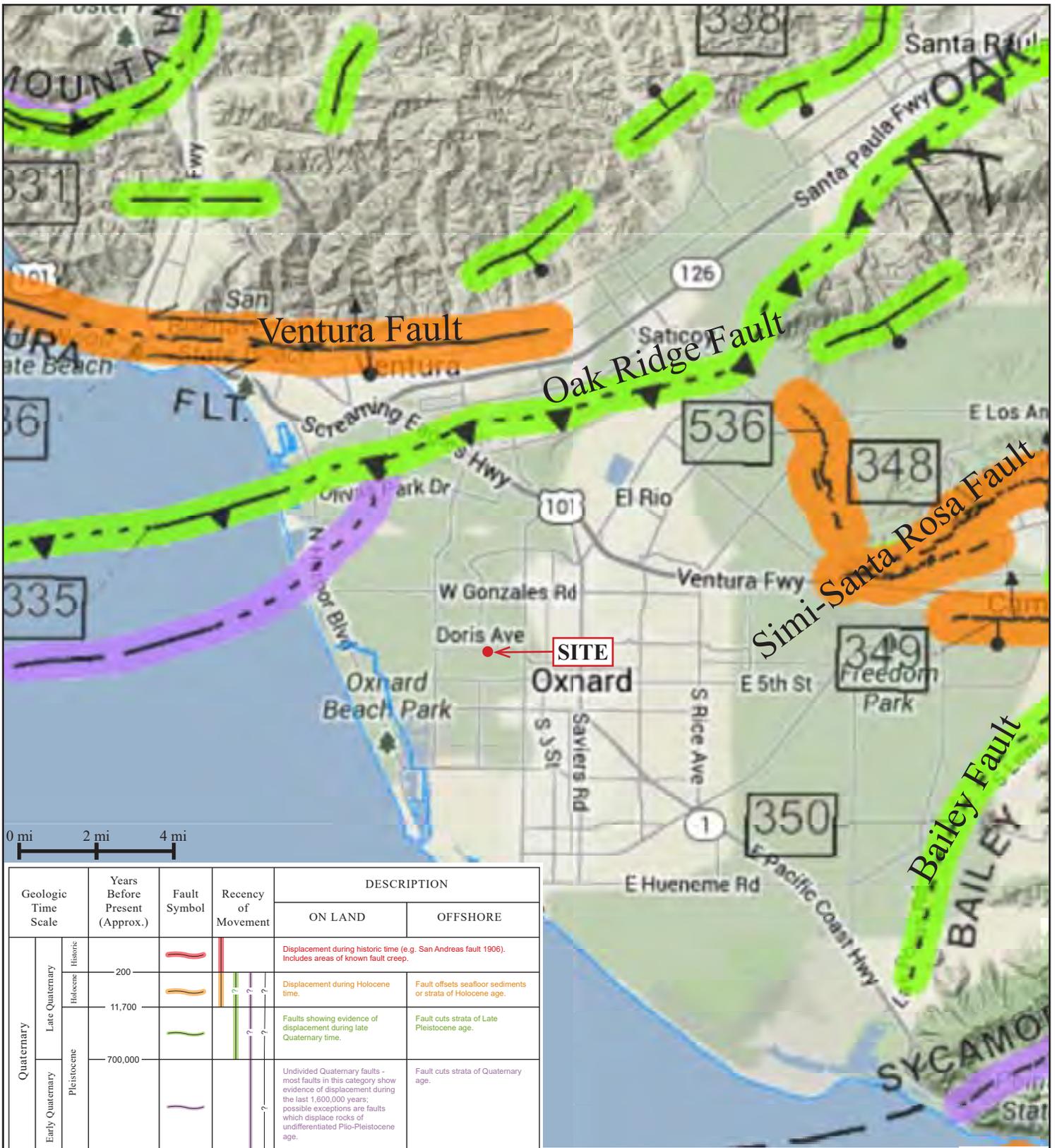


Qhff

Holocene alluvial fan deposits, fine facies; fine-grained alluvial fan and flood plain overbank deposits on very gently sloping portions of the valley floor; composed of predominantly clay with interbedded lenses of coarser alluvium (sand and occasional gravel).

Reference: Geologic Map of the Oxnard 7.5' Quadrangle, Ventura County, California, Version 1.0, 2003

	Project Name	Project No. 13-0637	Drawing Title	Figure
	Teal Club Middle School Academy Oxnard, California	Date January 2014	Geology Map	A-4



Geologic Time Scale	Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION	
				ON LAND	OFFSHORE
Quaternary	Late Quaternary	Historic	200	[Symbol]	Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.
	Early Quaternary	Pleistocene	700,000	[Symbol]	Faults showing evidence of displacement during late Quaternary time. Fault cuts strata of Late Pleistocene age.
Pre-Quaternary					
	4.5 billion (Age of Earth)	[Symbol]	Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive. Fault cuts strata of Pliocene or older age.		

* Quaternary now recognized as extending to 2.6 Ma (Walker and Geissman, 2009). Quaternary faults in this map were established using the previous 1.6 Ma criterion.

Reference: 2010 Fault Activity Map of CA, CA Geological Survey Web Site, See following page, Figure A-5a, for explanation

	Project Name	Project No. 13-0637	Drawing Title	Figure
	Teal Club Middle School Academy Oxnard, California	Date January 2014	Fault Map	A-5

EXPLANATION

Fault traces on land are indicated by solid lines where well located, by dashed lines where approximately located or inferred, and by dotted lines where concealed by younger rocks or by lakes or bays. Fault traces are queried where continuation or existence is uncertain. Concealed faults in the Great Valley are based on maps of selected subsurface horizons, so locations shown are approximate and may indicate structural trend only. All offshore faults based on seismic reflection profile records are shown as solid lines where well defined, dashed where inferred, dashed where queried where uncertain.

FAULT CLASSIFICATION COLOR CODE (Indicating Recency of Movement)

- 

Fault along which historic (last 200 years) displacement has occurred and is associated with one or more of the following:

 - (a) a recorded earthquake with surface rupture. (Also included are some well-defined surface breaks caused by ground shaking during earthquakes, e.g. extensive ground breakage, not on the White Wolf fault, caused by the Arvin-Tehachapi earthquake of 1952). The date of the associated earthquake is indicated. Where repeated surface ruptures on the same fault have occurred, only the date of the latest movement may be indicated, especially if earlier reports are not well documented as to location of ground breaks.
 - (b) fault creep slippage - slow ground displacement usually without accompanying earthquakes.
 - (c) displaced survey lines.

- 

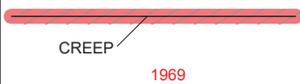
A triangle to the right or left of the date indicates termination point of observed surface displacement. Solid red triangle indicates known location of rupture termination point. Open black triangle indicates uncertain or estimated location of rupture termination point.

- 

Date bracketed by triangles indicates local fault break.

- 

No triangle by date indicates an intermediate point along fault break.

- 

Fault that exhibits fault creep slippage. Hachures indicate linear extent of fault creep. Annotation (creep with leader) indicates representative locations where fault creep has been observed and recorded.

- 

Square on fault indicates where fault creep slippage has occurred that has been triggered by an earthquake on some other fault. Date of causative earthquake indicated. Squares to right and left of date indicate terminal points between which triggered creep slippage has occurred (creep either continuous or intermittent between these end points).

- 

Holocene fault displacement (during past 11,700 years) without historic record. Geomorphic evidence for Holocene faulting includes sag ponds, scarps showing little erosion, or the following features in Holocene age deposits: offset stream courses, linear scarps, shutter ridges, and triangular faceted spurs. Recency of faulting offshore is based on the interpreted age of the youngest strata displaced by faulting.

- 

Late Quaternary fault displacement (during past 700,000 years). Geomorphic evidence similar to that described for Holocene faults except features are less distinct. Faulting may be younger, but lack of younger overlying deposits precludes more accurate age classification.

- 

Quaternary fault (age undifferentiated). Most faults of this category show evidence of displacement sometime during the past 1.6 million years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age. Unnumbered Quaternary faults were based on Fault Map of California, 1975. See Bulletin 201, Appendix D for source data.

- 

Pre-Quaternary fault (older than 1.6 million years) or fault without recognized Quaternary displacement. Some faults are shown in this category because the source of mapping used was of reconnaissance nature, or was not done with the object of dating fault displacements.

ADDITIONAL FAULT SYMBOLS

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Bar and ball on downthrown side (relative or apparent).

- 

Arrows along fault indicate relative or apparent direction of lateral movement.

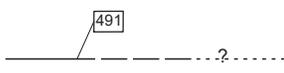
- 

Arrow on fault indicates direction of dip.

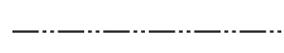
- 

Low angle fault (barbs on upper plate). Fault surface generally dips less than 45° but locally may have been subsequently steepened. On offshore faults, barbs simply indicate a reverse fault regardless of steepness of dip.

OTHER SYMBOLS

- 

Numbers refer to annotations listed in the appendices of the accompanying report. Annotations include fault name, age of fault displacement, and pertinent references including Earthquake Fault Zone maps where a fault has been zoned by the Alquist-Priolo Earthquake Fault Zoning Act. This Act requires the State Geologist to delineate zones to encompass faults with Holocene displacement.

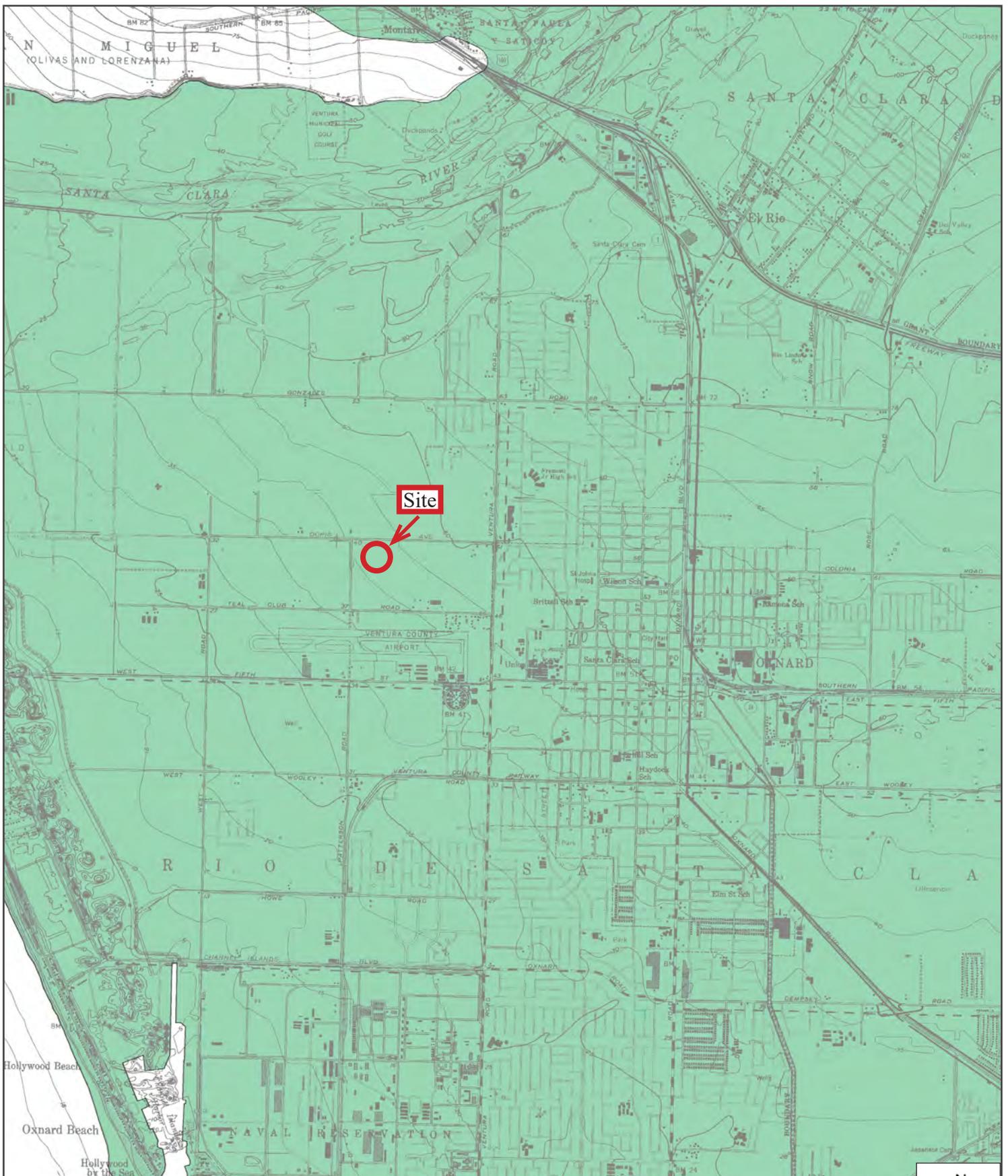
- 

Structural discontinuity (offshore) separating differing Neogene structural domains. May indicate discontinuities between basement rocks.

- 

Brawley Seismic Zone, a linear zone of seismicity locally up to 10 km wide associated with the releasing step between the Imperial and San Andreas faults.

	<p>Project Name Teal Club Middle School Academy Oxnard, California</p>	<p>Project No. 13-0637</p> <p>Date January 2014</p>	<p>Drawing Title Fault Map Legend</p>	<p>Figure A-5a</p>
--	---	---	--	---------------------------------------

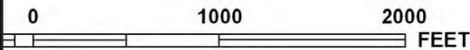


Seismic Hazard Zones, Oxnard Quadrangle, Released December 20, 2002

	<p>Project Name Teal Club Middle School Academy Oxnard, California</p>	<p>Project No. 13-0637 Date January 2014</p>	<p>Drawing Title Seismic Hazard Zone Map</p>	<p>Figure A-6</p>
--	--	---	--	-------------------------------



MAP SCALE 1" = 1000'



Reference: FEMA Map Service Center, URL: <http://msc.fema.gov>

See Figure A-7a for Legend



Project Name
Teal Club Middle School Academy
Oxnard, California

Project No. **13-0637**
 Date **January 2014**

Drawing Title
Flood Map

Figure
A-7

LEGEND



SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



OTHER FLOOD AREAS

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.



OTHER AREAS

- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.



COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS



OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- Cross section line
- Transect line
- $87^{\circ}07'45''$, $32^{\circ}22'30''$ Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- $\geq 76^{00}N$ 1000-meter Universal Transverse Mercator grid values, zone 11N
- 600000 FT 5000-foot grid ticks: California State Plane coordinate system, zone V (FIPZONE 0405), Lambert Conformal Conic projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

NFIP

PANEL 0905E

FIRM

FLOOD INSURANCE RATE MAP

VENTURA COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 905 OF 1275

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
OXNARD, CITY OF	060417	0905	E
SAN BUENAVENTURA, CITY OF	060419	0905	E
VENTURA COUNTY	060413	0905	E

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



**MAP NUMBER
06111C0905E**

**EFFECTIVE DATE
JANUARY 20, 2010**

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM



Project Name
**Teal Club Middle School Academy
Oxnard, California**

Project No. **13-0637**

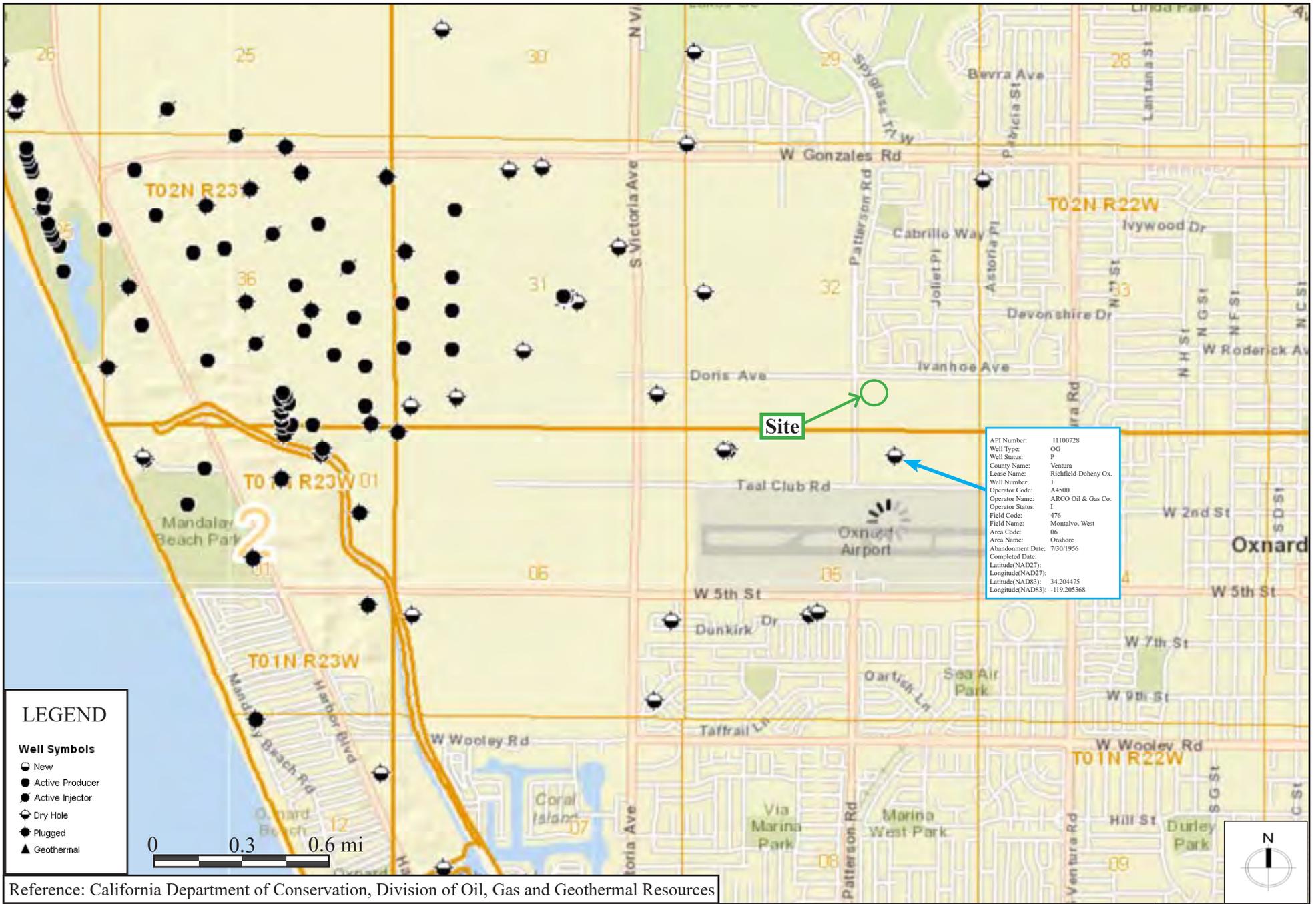
Date **January 2014**

Drawing Title

**Flood Map
Legend**

Figure

A-7a



Reference: California Department of Conservation, Division of Oil, Gas and Geothermal Resources

	Project Name	Project No.	Drawing Title	Figure
	<p align="center">Teal Club Middle School Academy Oxnard, California</p>	<p align="center">13-0637</p>	<p align="center">Oil Wells Map</p>	<p align="center">A-8</p>
	Date			
		<p align="center">January 2014</p>		

USGS Design Maps Summary Report

User-Specified Input

Report Title Teal Club Middle School Academy, Oxnard, California

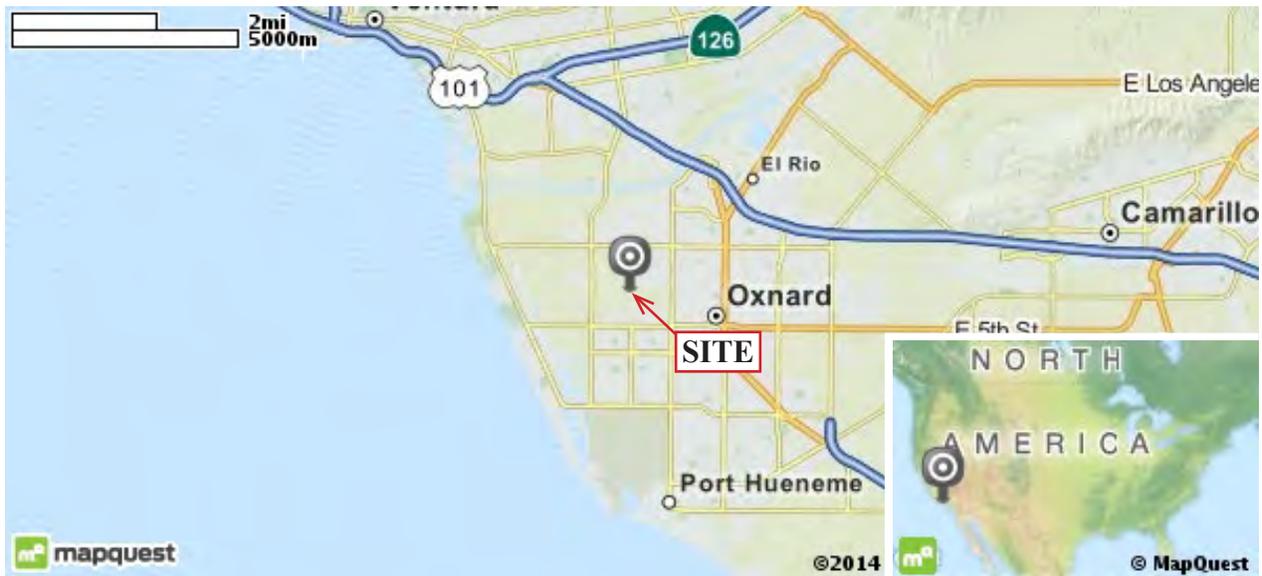
Thu January 23, 2014 20:40:44 UTC

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 34.2066°N, 119.2077°W

Site Soil Classification Site Class D – “Stiff Soil”

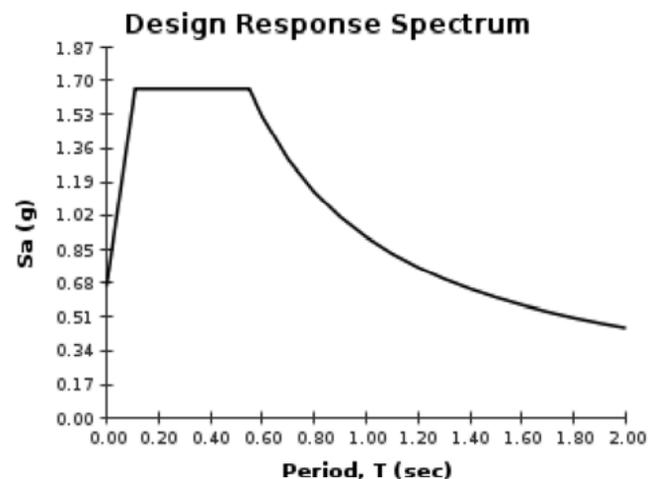
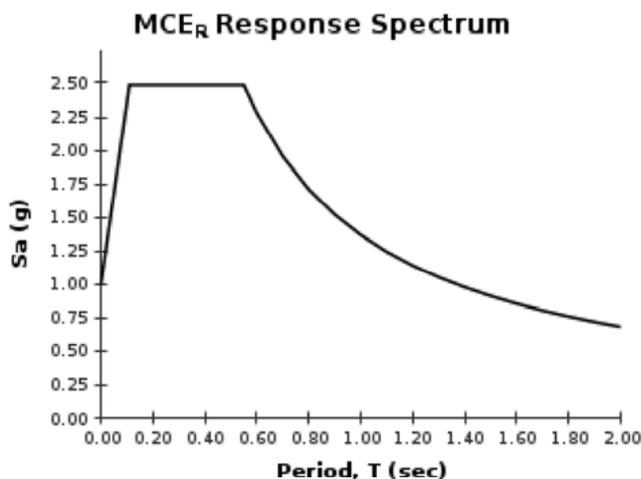
Risk Category I/II/III



USGS-Provided Output

$S_s = 2.485 \text{ g}$	$S_{MS} = 2.485 \text{ g}$	$S_{DS} = 1.657 \text{ g}$
$S_1 = 0.912 \text{ g}$	$S_{M1} = 1.368 \text{ g}$	$S_{D1} = 0.912 \text{ g}$

For information on how the S_s and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



Project Name
**Teal Club Middle School Academy
Oxnard, California**

Project No. **13-0637**
Date **January 2014**

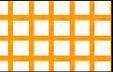
Drawing Title
Response Spectrum

Figure
A-9

APPENDIX B

BORING AND CPT LOGS

KEY TO LOGS

SOILS CLASSIFICATION						
MAJOR DIVISIONS			GRAPHIC LOG	USCS SYMBOL	TYPICAL NAMES	
COARSE GRAINED SOILS	GRAVELS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
		LESS THAN 5% FINES		GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	
		MORE THAN 12% FINES		GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES	
	SANDS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
		LESS THAN 5% FINES		SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
		SANDS WITH FINES		SM	SILTY SANDS, SAND-SILT MIXTURES	
		MORE THAN 12% FINES		SC	CLAYEY SANDS, SAND-CLAY MIXTURES	
		SILTS AND CLAYS	LIQUID LIMIT IS LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
	OL		ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY			
	MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR GRAVELLY ELASTIC SILTS			
	CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS				
HIGHLY ORGANIC SOILS				PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	

GRAIN SIZES							
SILT AND CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		
	#200	#40	#10	#4	3/4"	3"	12"
SIEVE SIZES							

KEY TO LOGS (continued)

SPT/CD BLOW COUNTS VS. CONSISTENCY/DENSITY					
FINE-GRAINED SOILS (SILTS, CLAYS, etc.)			GRANULAR SOILS (SANDS, GRAVELS, etc.)		
CONSISTENCY	*BLOWS/FOOT		RELATIVE DENSITY	*BLOWS/FOOT	
	SPT	CD		SPT	CD
SOFT	0-4	0-4	VERY LOOSE	0-4	0-8
FIRM	5-8	5-9	LOOSE	5-10	9-18
STIFF	9-15	10-18	MEDIUM DENSE	11-30	19-54
VERY STIFF	16-30	19-39	DENSE	31-50	55-90
HARD	over 30	over 39	VERY DENSE	over 50	over 90

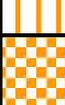
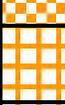
* CONVERSION BETWEEN CALIFORNIA DRIVE SAMPLERS (CD) AND STANDARD PENETRATION TEST (SPT) BLOW COUNT HAS BEEN CALCULATED USING "FOUNDATION ENGINEERING HANDBOOK" BY H.Y. FANG. (**VALUES ARE FOR 140 Lbs HAMMER WEIGHT ONLY**)

DESCRIPTIVE ADJECTIVE VS. PERCENTAGE	
DESCRIPTIVE ADJECTIVE	PERCENTAGE REQUIREMENT
TRACE	1 - 10%
LITTLE	10 - 20%
SOME	20 - 35%
AND	35 - 50%

*THE FOLLOWING "DESCRIPTIVE TERMINOLOGY/ RANGES OF MOISTURE CONTENTS" HAVE BEEN USED FOR MOISTURE CLASSIFICATION IN THE LOGS.

APPROXIMATE MOISTURE CONTENT DEFINITION	
DEFINITION	DESCRIPTION
DRY	Dry to the touch; no observable moisture
SLIGHTLY MOIST	Some moisture but still a dry appearance
MOIST	Damp, but no visible water
VERY MOIST	Enough moisture to wet the hands
WET	Almost saturated; visible free water

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Boring No. : B-1 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
1	19.1		4 4 3	0	X		ML	FILL: Sandy SILT; soft		
								ALLUVIUM SILT with SAND; firm, layers of sandy clay, moist, dark olive brown	#200 Wash Fines = 81 %	
2	20.2	112	6 10 13	5	■		ML	Sandy SILT; stiff, slightly moist, light brown	#200 Wash Fines = 67 % PP = 2.5 tsf	
								Layers of sandy lean clay	PP=0.5-0.75 tsf	
3	17.8		2 3 4	10	X		SC	Clayey SAND; loose, moist, dark brown	#200 Wash Fines = 38 %	
4	17.2	111	7 10 14	15	■		SM	Silty SAND; medium dense, very moist, mottled yellowish brown and grayish brown	#200 Wash Fines = 16 %	
								Sandy SILT; stiff, moist, pale brown		
5	21.4		7 6 5	20	X		ML	Thin layers of lean clay	#200 Wash Fines = 54 %	
6	20.2		10 14 21	25	X		SM	Silty SAND; dense, wet, olive gray	#200 Wash Fines = 14 %	
7	20.1		15 17 22	30	X			Lenses of lean clay	#200 Wash Fines = 13 %	
								End of Boring @ 26' 6" Groundwater encountered @ 17'		

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Boring No. : B-2 Sheet : 1 Of : 2 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
				0			SM	FILL Silty SAND; very fine, loose, dry, light brown		
1	21.5	102	2 3 6	0 3 6			SM	ALLUVIUM Sandy Lean CLAY; firm, moist, brown	#200 Wash Fines = 63% PP = 1.2 tsf	
2	24.8		2 2 3	5 7 8			CL	Lean clay	#200 Wash Fines = 85% PP = 2.5 tsf	
3	24.4	96	3 5 4	8 10 12			CL	Lean Clay	#200 Wash Fines = 87%	
4	18.0		2 3 4	10 12 14				8" layers of of clayey sand	#200 Wash Fines = 37% LL = 21 PL = 16	
5	21.4		2 3 4	15 17 19			ML	Sandy SILT; firm, moist, olive brown	#200 Wash Fines = 64% PP = 3.5 tsf	
6	21.8		2 4 6	20 22 24			ML		#200 Wash Fines = 56%	
7	21.5		7 10 12	25 27 29			SM	Silty SAND; fine to medium, layers of poorly graded sand, medium dense, wet, olive gray	#200 Wash Fines = 16%	
8	21.4		7 8 9	30 31 32			SP-SM	Poorly graded SAND with SILT; fine to medium, medium dense, wet, brownish gray	#200 Wash Fines = 8%	
9	19.0		9 8 13	35 37 40			SM	Silty SAND; fine to medium, lenses of dark brown lean clay, wet, gray and yellowish brown	#200 Wash Fines = 40%	

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Boring No. : B-2 Sheet : 2 Of : 2 Ground Elevation: Drilling Co. : Geoboden. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
10	20.1		10 14 22	40	X		SP-SM	Poorly graded SAND with SILT; fine, dense, wet, dark olive gray	#200 Wash Fines = 5%	
11	19.5		4 6 10	45	X		ML	Sandy SILT; layers of sandy lean clay, very stiff, moist, gray	#200 Wash Fines = 70%	
12	19.9		8 13 18	50	X		SP-SM	Poorly graded SAND with SILT; fine to coarse, medium dense	#200 Wash Fines = 11%	
End of Boring @ 51' 6" Groundwater encountered @15' 8"										

Groundwater 

Bulk 

CD 

SPT 

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hollow Stem 8" Auger Sampling Method : Bulk - CD - SPT Hammer Weight : 140 lbs Drop Height : 30" Location : See Figure A-2		Boring No. : B-3 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
1	20.8		3 3 4	0			ML	FILL Sandy SILT; soft, moist		
				3			ALLUVIUM : Sandy SILT; thin layers of sandy clay, firm, moist, dark brown	#200 Wash Fines = 67%		
2	24.1	103	6 8 10	5			ML	Thin layers of sandy clay	#200 Wash Fines = 75% PP = 2.2 tsf	
				10						
3	26.1		3 4 6	10			CL	Sandy Lean CLAY; layers of sandy silt, firm, moist, light olive gray	#200 Wash Fines = 65% PP=1.5-1.7 tsf	
				10						
4	22.3	103	7 8 10	10				Layers of silty sand	#200 Wash Fines = 64%	
				10						
5	31.3		3 4 7	15			ML	SILT; stiff, moist, pale brown Layers of silty sand	#200 Wash Fines = 87% PP = 4.0 tsf	
				15						
6	21.0		3 5 6	20			CL	Sandy Lean CLAY; thin layers of sandy silt, stiff, moist, pale brown	#200 Wash Fines = 59% LL = 28 PL = 20 PP = 1.7 tsf	
				20						
7	23.0		10 14 18	25			ML	Sandy SILT; thin layers of lean clay with sand, very stiff, moist, pale brown Thin layers of silty sand	#200 Wash Fines = 80% PP = 4.0 tsf	
				25						
End of Boring @ 26' 6"										
Groundwater encountered @ approx. 19'										

Groundwater

Bulk

CD

SPT

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2		Boring No. : P-1 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
1	7.9			0			ML	FILL: Sandy SILT; slightly moist, brown	#200 Wash Fines = 57%	
2	12.8						ML	ALLUVIUM Sandy SILT; firm, slightly moist, brown	#200 Wash Fines = 66%	
3	23.4						CL	Sandy Lean CLAY; firm, moist, dark brown, caliche	Fines = 80%	
4	24.4			5					Fines = 69%	
5	24.2								Fines = 62%	
6	25.2						ML	Sandy SILT; very moist, pale brown	Fines = 50%	
7	28.0						SM	Silty SAND; very moist, pale brown	Fines = 37%	
								End of Boring @ 8' No groundwater encountered		

Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2		Boring No. : P-2 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
				0			ML	FILL: Sandy SILT; soft		
							CL	ALLUVIUM : Sandy Lean CLAY; firm, moist, dark brown		
				5			ML	Sandy SILT; firm, moist, brown		
								No groundwater encountered		
				10						
				15						
				20						
				25						
				30						
				35						
				40						

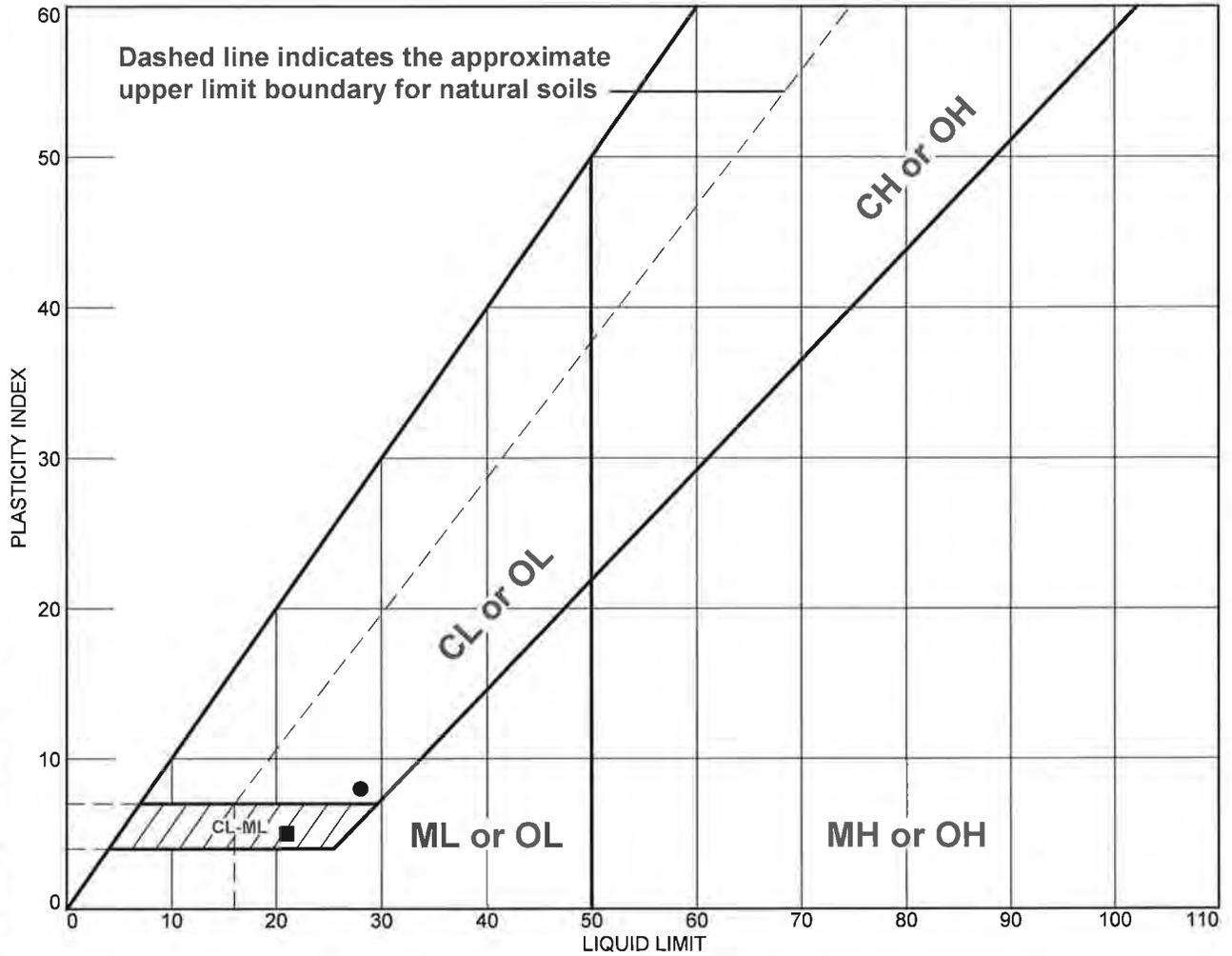
Boring Log

							Project No. : 13-0637 Project Name : Teal Club Middle School Academy Drilling Method : Hand Auger Sampling Method : Bulk Hammer Weight : Drop Height : Location : See Figure A-2		Boring No. : P-3 Sheet : 1 Of : 1 Ground Elevation: Drilling Co. : Geoboden, Inc. Date Drilled : 1/24/14	
Sample No.	Moisture Content (%)	Dry Unit Weight (pcf)	Blows	Depth (ft)	Sample Location	Graphic Log	Soil Type (USCS)	Description	Additional Tests	
1	13.6			0			SM	FILL: Silty SAND; fine, moist, dark brown	#200 Wash Fines = 36%	
2	18.3						SM	ALLUVIUM Silty SAND; fine, moist, dark brown	#200 Wash Fines = 47%	
3	23.1			5			ML	Sandy SILT; layers of sandy lean clay, moist, brown	#200 Wash Fines = 65%	
4	23.0						CL	Sandy Lean CLAY; firm, very moist, brown	#200 Wash Fines = 53%	
End of boring @ 7' 6" No groundwater encountered										

APPENDIX C

LABORATORY TEST RESULTS

LIQUID AND PLASTIC LIMITS TEST REPORT



These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Olive Brown Lean Clay with Silt	28	20	8			CL
■	Dark Brown Silty Clay	21	16	5			CL-ML

Project No. 13-0637 **Client:**
Project: Teal Club
● Location: B3 @ 20' **Sample Number:** 2335 Series
■ Location: B2 @ 11' **Sample Number:** 2335 Series

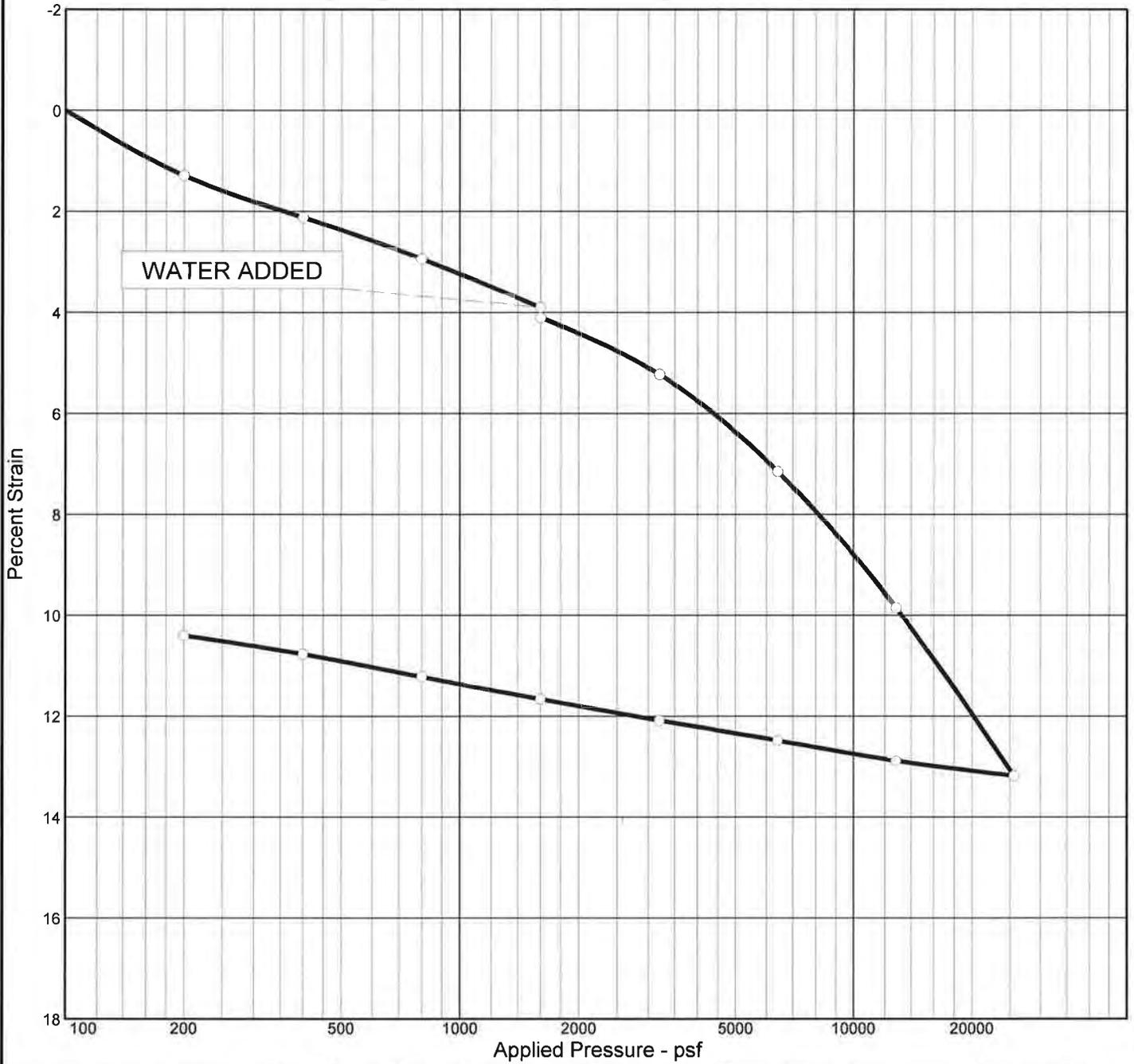
Remarks:
 ● Lab #2335 Series. Completed 2/4/14.
 ■ Lab #2335 Series. Completed 2/5/14.

Koury Geotechnical Services, Inc.

Tested By: Mathew F. Perry

Checked By: _____

CONSOLIDATION TEST REPORT

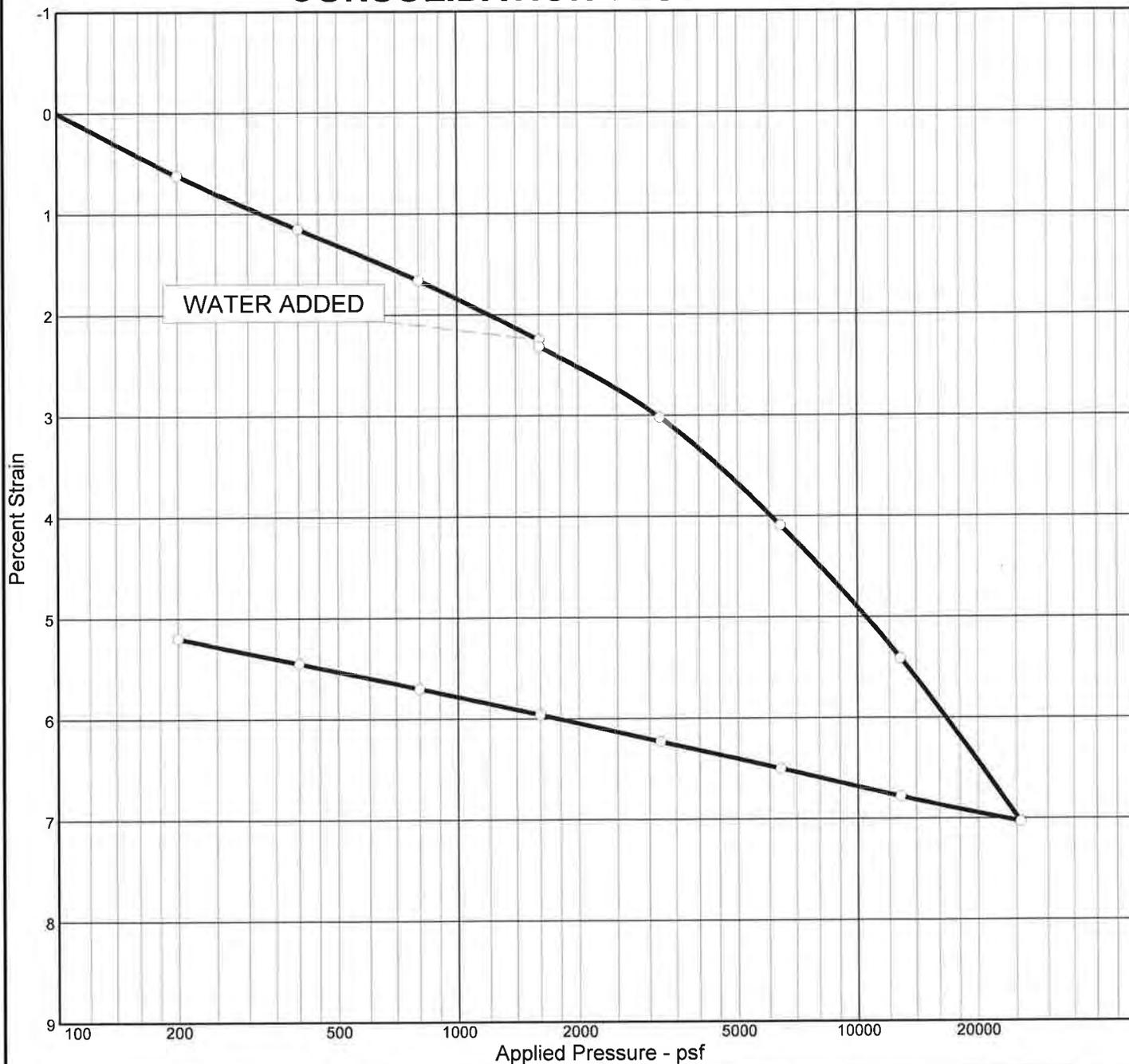


Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (psf)	P _c (psf)	C _c	C _s	Swell Press. (psf)	Clpse. %	e _o
Sat.	Moist.											
86.4 %	21.5 %	100.9			2.7		9011	0.15	0.02		0.2	0.671

MATERIAL DESCRIPTION	USCS	AASHTO
Very Dark Grayish Brown Lean Clay	CL	

Project No. 13-0637 Project: Teal Club Location: B2 @ 2'	Client:	Remarks: Lab #2335 Series. Completed 2/ 14/ 14.
---	----------------	---

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (psf)	P _c (psf)	C _c	C _s	Swell Press. (psf)	Clpse. %	e ₀
Sat.	Moist.											
92.8 %	23.8 %	99.5			2.7		5139	0.06	0.01		0.1	0.693

MATERIAL DESCRIPTION	USCS	AASHTO
Dark Grey Silty Lean Clay	CL	

Project No. 13-0637 Project: Teal Club Location: B3 @ 12'	Client:	Remarks: Lab #2335 Series. Completed 2/ 14/ 14.
--	----------------	---

APPENDIX D

PERCOLATION TEST RESULTS

Percolation Testing



Job Name: Geohazard Study
Job No.: 13-0637
Test Location: Southwest end of site
Water Table Depth (ft): 8 **Relatively Impervious Layer Depth (ft):** _____
Test Date: 1/22/2014

Test No.: P1
Depth of Boring (d_b): 36 in
Diameter of Boring (D): 6 in
Test Performer: MN

Trial No.	Time of Testing			Water Level Measurement		Water Level Calculations				Percolation and Infiltration Calculations		
	Initial Time T ₁ (min)	Final Time T ₂ (min)	Time Interval ΔT = T ₂ - T ₁ (min)	Initial Depth to Water d ₁ (in)	Final Depth to Water d ₂ (in)	Initial Height of Water Colum d _{H1} = d _b - d ₁ (in)	Final Height of Water Column d _{H2} = d _b - d ₂ (in)	Drop in Height Δd _H = d _{H1} - d _{H2} (in)	Average Height of Water Column d _{avg} = (d _{H1} + d _{H2}) / 2 (in)	Measured Percolation K _i = Δd _H / ΔT (in/hr)	Reduction Factor R _f = ((2d _{H1} - Δd _H) / D) + 1	Infiltration Rate K = K _i / R _f (in/hr)
1	0	30.0	30.0	12.3	18.3	23.7	17.7	6.0	20.7	12.0	7.9	1.5
2	0	30.0	30.0	12.3	18.7	23.8	17.3	6.5	20.5	12.9	7.8	1.6
3	0	30.0	30.0	12.3	18.9	23.8	17.1	6.7	20.4	13.3	7.8	1.7
4	0	30.0	30.0	12.3	18.5	23.8	17.5	6.3	20.6	12.5	7.9	1.6
5	0	30.0	30.0	12.3	18.5	23.8	17.5	6.3	20.6	12.5	7.9	1.6
6	0	30.0	30.0	12.3	18.3	23.8	17.7	6.1	20.7	12.1	7.9	1.5
7	0	30.0	30.0	12.3	18.0	23.8	18.0	5.8	20.9	11.5	8.0	1.4
8	0	30.0	30.0	12.3	18.0	23.8	18.0	5.8	20.9	11.5	8.0	1.4

Note:

1. Reduction Factor, $R_f = ((2d_{H1} - \Delta d_H) / D) + 1$

2. Long Term Infiltration Rate = Short Term Infiltration Rate / Correction Factor for Siltation and Other Factors

Correction Factor Range, used to account for Long Term Moderate Siltation, Test Scale Limitations and other Factors= 3 to 12

Reference: Los Angeles County Administrative Manual - Low Impact Development Best Management Practice Guideline for Design, Investigation, and Reporting, dated 06/01/11

Lowest Short Term Infiltration Rate = 1.4 in/hr

Adjusted Long Term Infiltration Rate = 0.2 in/hr

Percolation Testing



Job Name: Geohazard Study
 Job No.: 13-0637
 Test Location: Northeast corner of site
 Water Table Depth (ft): 8 Relatively Impervious Layer Depth (ft): _____
 Test Date: 1/22/2014

Test No.: P3
 Depth of Boring (d_b): 65 in
 Diameter of Boring (D): 6 in
 Test Performer: MN

Trial No.	Time of Testing			Water Level Measurement		Water Level Calculations				Percolation and Infiltration Calculations		
	Initial Time T ₁ (min)	Final Time T ₂ (min)	Time Interval ΔT = T ₂ - T ₁ (min)	Initial Depth to Water d ₁ (in)	Final Depth to Water d ₂ (in)	Initial Height of Water Colum d _{H1} = d _b - d ₁ (in)	Final Height of Water Column d _{H2} = d _b - d ₂ (in)	Drop in Height Δd _H = d _{H1} - d _{H2} (in)	Average Height of Water Column d _{avg} = (d _{H1} + d _{H2}) / 2 (in)	Measured Percolation K _i = Δd _H / ΔT (in/hr)	Reduction Factor R _f = ((2d _{H1} - Δd _H) / D) + 1	Infiltration Rate K = K _i / R _f (in/hr)
1	0	30.0	30.0	27.0	39.8	38.0	25.2	12.8	31.6	25.6	11.5	2.2
2	0	30.0	30.0	27.0	38.3	38.0	26.7	11.3	32.4	22.6	11.8	1.9
3	0	30.0	30.0	27.0	38.8	38.0	26.2	11.8	32.1	23.6	11.7	2.0
4	0	30.0	30.0	27.0	38.5	38.0	26.5	11.5	32.3	23.0	11.8	2.0
5	0	30.0	30.0	27.0	37.6	38.0	27.4	10.6	32.7	21.2	11.9	1.8
6	0	30.0	30.0	27.0	38.3	38.0	26.7	11.3	32.4	22.6	11.8	1.9
7	0	30.0	30.0	27.0	38.1	38.0	26.9	11.1	32.5	22.2	11.8	1.9
8	0	30.0	30.0	27.0	37.7	38.0	27.3	10.7	32.7	21.4	11.9	1.8

Note:

1. Reduction Factor, $R_f = ((2d_{H1} - \Delta d_H) / D) + 1$

2. Long Term Infiltration Rate = Short Term Infiltration Rate / Correction Factor for Siltation and Other Factors

Correction Factor Range, used to account for Long Term Moderate Siltation, Test Scale Limitations and other Factors= 3 to 12

Reference: Los Angeles County Administrative Manual - Low Impact Development Best Management Practice Guideline for Design, Investigation, and Reporting, dated 06/01/11

Lowest Short Term Infiltration Rate = 1.8 in/hr

Adjusted Long Term Infiltration Rate = 0.3 in/hr

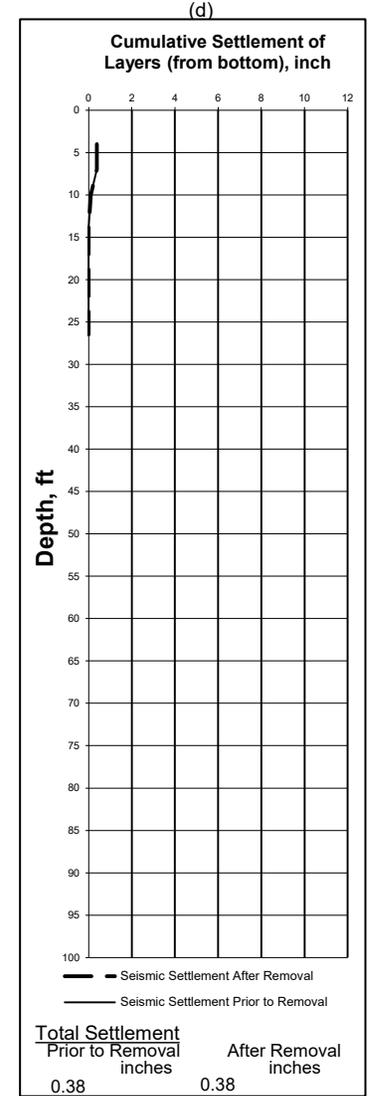
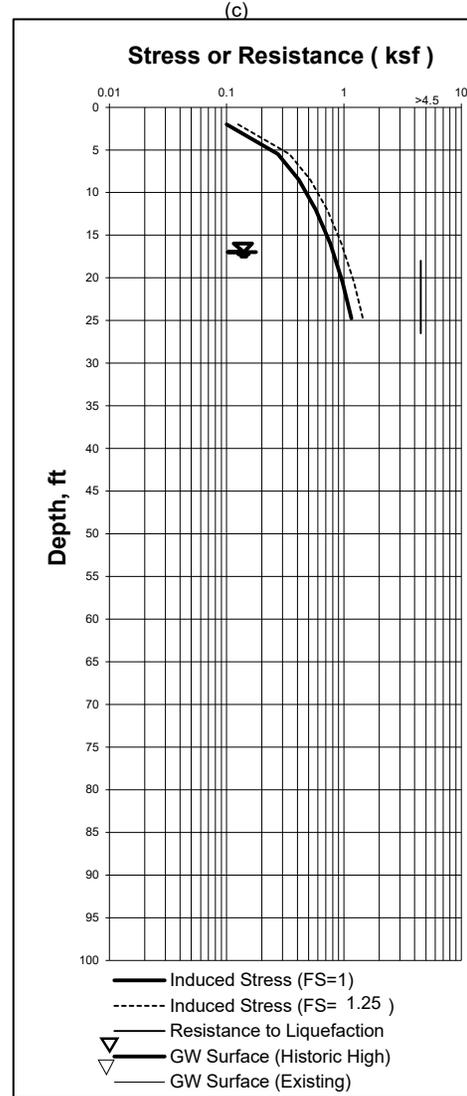
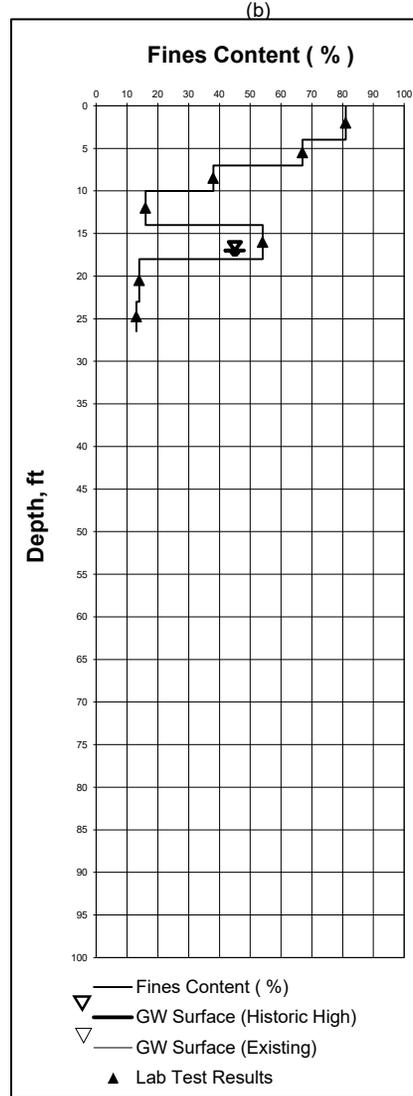
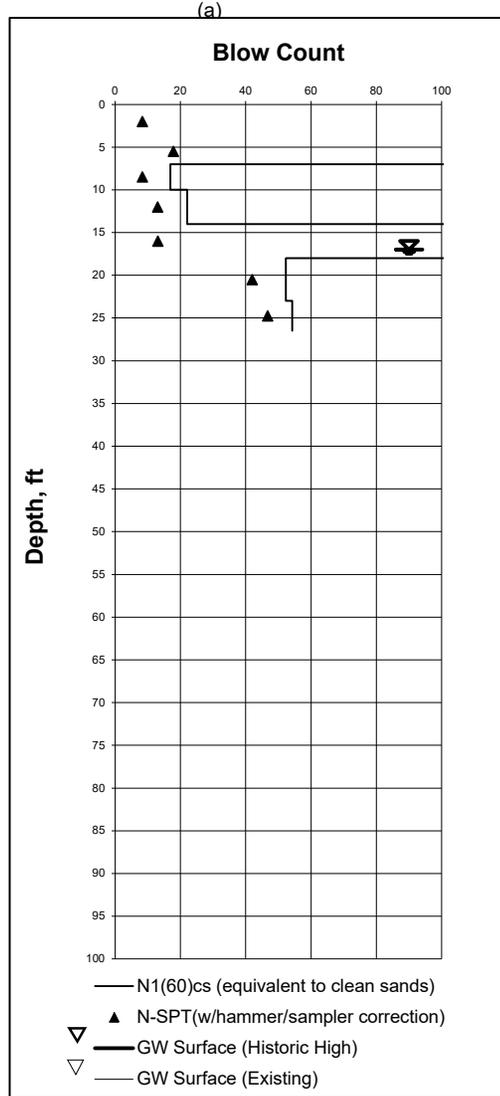
APPENDIX E

SEISMIC SETTLEMENT CALCULATIONS

COMPUTER PROGRAM: EQLique&Settle"2"

Location..... **B-1** Surcharge 0.00 ksf
 Elevation (MSL) (ft) 42

NOTE: If the total settlement is very small (e.g. <0.05"), it will not be seen due to the scale used, and should be reported as "negligible".



Removal & Recomp. Depth (ft) = 0

PROJECT: Teal Club Middle School Academy
 Los Angeles, L.A. County, California

Weighted Ground Accel. (M=7.5) = 0.59 g

Site Magnitude = 7.2

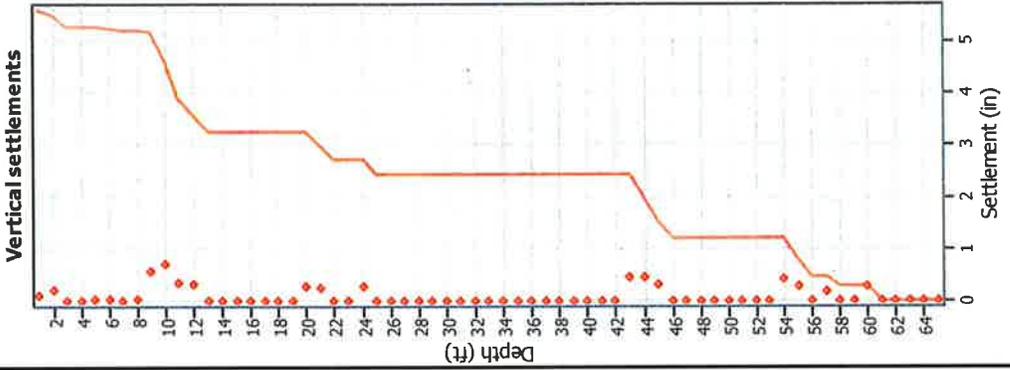
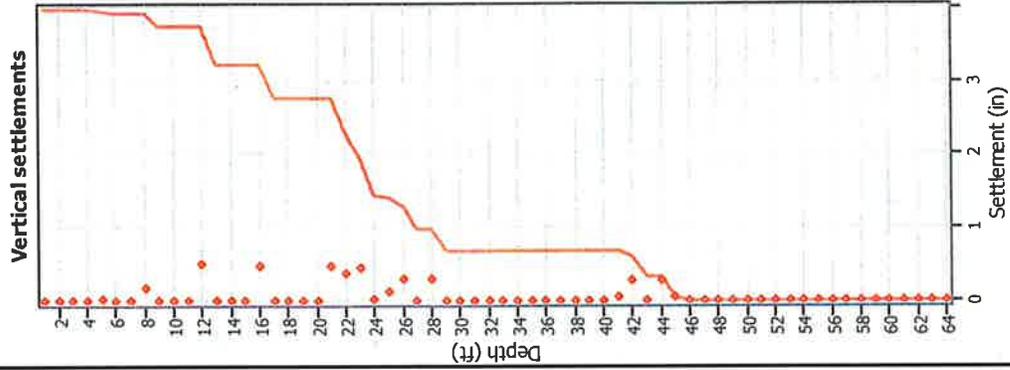
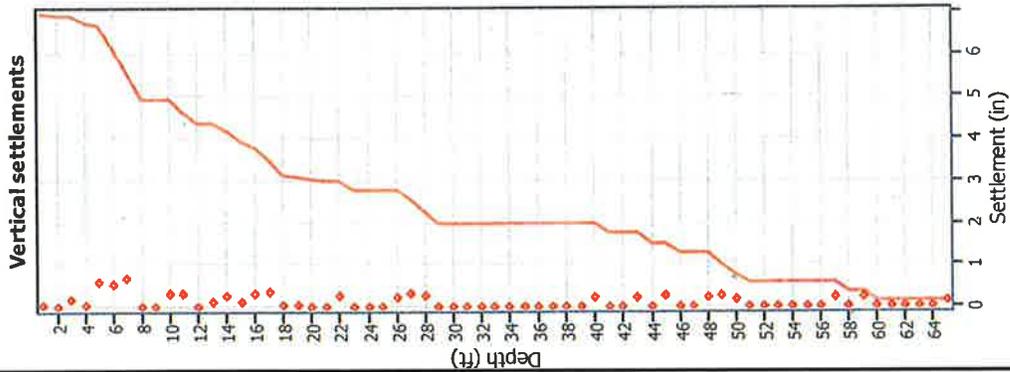
Liquefaction Potential and Seismic Settlements Based on Boring Data

Koury Geo
Geotechnical Engineering Consultants

Job No.: 13-0637

Date: 2-18-2014

Figure No. E-1 Dry Settlement



Project Name

Teal Club Middle School Academy
Oxnard, California

Project No:

13-0637

Drawing Title

Calculated Seismic Settlements

Figure

A-10

Date:

February 2014

We provide geotechnical engineering services to both private and public sector clients. We perform soils and geology investigation during the design phase, as well as grading observation and soils testing during the course of construction.

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**F PRELIMINARY ENDANGERMENT ASSESSMENT AND
SOIL MANAGEMENT PLAN**

BOARD AGENDA ITEM

Name of Contributor: Dr. Cesar Morales/David Fateh

Date of Meeting: 08/02/17

STUDY SESSION _____

CLOSED SESSION _____

SECTION A-1: PRELIMINARY _____

SECTION A-II: REPORTS _____

SECTION B: HEARINGS _____

SECTION C: CONSENT AGENDA

Agreement Category:

_____ Academic

_____ Enrichment

_____ Special Education

_____ Support Services

_____ Personnel

_____ Legal

_____ Facilities

SECTION D: ACTION _____

SECTION F: BOARD POLICIES 1ST Reading _____ 2nd Reading _____

APPROVAL OF RESOLUTION #17-07 ADOPTING THE PRELIMINARY ENVIRONMENTAL ASSESSMENT AND SOIL MANAGEMENT PLAN FOR THE DORIS/PATTERSON SITE (Morales/Fateh/CFW)

A Preliminary Environmental Assessment (PEA) report has been prepared for the Doris/Patterson school site as required, and recently accepted, by the California Department of Toxic Substances Control (DTSC). The PEA report presents investigation results and conclusions based on a health risk screening evaluation of the site, and recommends that a Soil Management Plan (SMP) be prepared in conjunction with a Land Use Covenant for the property.

The SMP details actions to be undertaken whenever soils at the site are disturbed during both planned and unplanned future construction activities. The SMP is a tool for contractors to utilize when performing activities that intrude into the soil such as excavation, grading, and utility installation. The plan provides guidance regarding how to handle the soil, as well as how to identify, sample, and properly dispose of soil that does not meet DTSC requirements.

A Land Use Covenant limits the site's future use to a school and more generally, non-residential purposes. A draft Land Use Covenant has been prepared by the DTSC and reviewed by the District as to form. The District is currently in the process of acquiring the site. Upon acquiring the site, the District may execute and enter into the Land Use Covenant.

Both the PEA Report and SMP have been reviewed and approved by the DTSC and are attached for reference. At this time, the District recommends that the Board of Trustees consider approving Resolution #17-07 adopting the PEA report and Soil Management Plan for the Doris/Patterson Site.

FISCAL IMPACT

None.

RECOMMENDATION

It is the recommendation of the Superintendent and the Director of Facilities, in conjunction with Caldwell Flores Winters, that the Board of Trustees approve Resolution #17-07 adopting the Preliminary Environmental Assessment report and Soil Management Plan for the Doris/Patterson Site.

ADDITIONAL MATERIAL

- Resolution #17-07 (2 pages)
- Preliminary Environmental Assessment dated March 29, 2017 (115 pages)
- Letter from DTSC dated May 4, 2017 approving Preliminary Environmental Assessment (4 pages)
- Soil Management Plan dated May 17, 2017 (84 pages)
- Letter from DTSC dated June 14, 2017 approving Soil Management Plan (3 pages)

RESOLUTION NO. 17-07

**RESOLUTION OF THE BOARD OF TRUSTEES OF THE OXNARD SCHOOL DISTRICT
ADOPTING THE PRELIMINARY ENVIRONMENTAL ASSESSMENT AND SOIL
MANAGEMENT PLAN FOR THE DORIS/PATTERSON SITE**

WHEREAS, as required by the California Department of Toxic Substances Control (“DTSC”), a Preliminary Environmental Assessment (“PEA”) report and Soil Management Plan (“SMP”) have been prepared for the Doris/Patterson site;

WHEREAS, the PEA report presents investigation results and conclusions based on a health risk screening evaluation of the Doris/Patterson site;

WHEREAS, the PEA report recommended that a SMP be prepared and that the District accept and enter into a long term deed restriction, known as a Land Use Covenant (“LUC”) for the property which would restrict the property to non-residential uses;

WHEREAS, the SMP details actions to be undertaken whenever soils at the site are disturbed during both planned and unplanned future construction activities and provides guidance regarding how to handle contaminated soil that may be encountered, as well as how to identify, sample, and properly dispose of contaminated soil as required;

WHEREAS, on March 23, 2017, the District opened a 30-day review period during which the public could provide comments to the PEA and a public hearing was held on April 19, 2017 and the public comment period closed on April 24, 2017;

WHEREAS, the District considered and responded to comments received from the public and other interested agencies regarding this PEA;

WHEREAS, the DTSC issued a letter approving the PEA report on May 4, 2017 and a letter approving the SMP on June 14, 2017;

WHEREAS, a draft Land Use Covenant has been prepared by the DTSC and reviewed by the District as to form;

WHEREAS, the District is currently in the process of acquiring the Doris/Patterson site and upon acquiring the site, the District may execute and enter into the Land Use Covenant;

NOW, THEREFORE, the Board of Trustees of the Oxnard School District hereby finds, determines, declares, orders, and resolves as follows:

- (1) All of the recitals set forth above are true and adopted as a part of the District’s official record;
- (2) A 30-day public review period for the PEA report and a public hearing have been conducted and all comments received have been considered;

- (3) A summary of any public comments received and the District's responses to comments has been forwarded to the DTSC;
- (4) The DTSC has approved the PEA report and SMP;
- (5) The Board adopts the PEA report and SMP for the Doris/Patterson site and approves the recommendations.

APPROVED, PASSED AND ADOPTED by the Board of Trustees of the Oxnard School District on this the 2nd day of August 2017, by the following vote:

Ayes: _____
 Nays: _____
 Abstentions: _____
 Absences: _____

Board of Trustees:

President Morrison: _____
 Clerk Cordes: _____
 Trustee O'Leary: _____
 Trustee Robles-Solis: _____
 Trustee Madrigal Lopez: _____

 Ernest Morrison
 President of the Board of Trustees
 Oxnard School District

I HEREBY CERTIFY that the foregoing resolution was duly and regularly introduced, passed and adopted by the members of the Board of Trustees of the Oxnard School District at a public meeting of said Board held on August 2, 2017.

 Debra M. Cordes
 Clerk of the Board of Trustees
 Oxnard School District

Response to DTSC Comments
 March 15 and March 29, 2017
 Proposed New Elementary and Middle Schools
 Southeast Corner of Doris Avenue and Patterson Road
 Oxnard, California

Item Number	DTSC Comment	ATC's Response
1	<p><i>Page 8, Section 5.4.5 Particulate Emission Factor: The particulate emission factor (PEF) calculation in Section 5.4.5 and Table C-4 is not applicalbe to construction worker, and a default value of $1 \times 10^6 \text{ m}^3/\text{kg}$ (see HERO HHRA Note Number 1, http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA_Note_1-2.pdf) should be used instead.</i></p>	<p>The default PEF value has been used in Section 5.4.5 and Table C-4.</p>
2	<p><i>Page 14, Section 5.7 Uncertainty Analysis ,4th bullet: The statement "...data for certain constituents (e.g., select OCPs) included composite, rather than discrete samples" should be clarified as all OCPs were evaluated using the composite sample data.</i></p>	<p>The recommended change has been made.</p>
3	<p><i>Page 15, Section 8.0 Recommendations: HERO recommends deleting the follownig statement "...the presence of toxaphene in shallow soil could pose a threat to public health under the unrestricted (i.e., residential) land use scenario..." to state that the lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} utilized by DTSC.</i></p>	<p>The recommended statement has been revised.</p>
4	<p><i>Table 1: The regional screening level of $340 \text{ }\mu\text{g}/\text{kg}$ for methoxychlor is incorrect, and should be revised to $320,000 \text{ }\mu\text{g}/\text{kg}$. For future reference, HERO recommends adjusting the screening levels by dividing the number of sample points (four in this case) when evaluating composite soil sampling results. However, such change is not essential in this report as a human health screening evaluation has been conducted to assess potential helath risks.</i></p>	<p>The methoxychlor regional screening level has been changed to $320,000 \text{ }\mu\text{g}/\text{kg}$.</p>

Response to DTSC Comments
 March 15 and March 29, 2017
 Proposed New Elementary and Middle Schools
 Southeast Corner of Doris Avenue and Patterson Road
 Oxnard, California

Item Number	DTSC Comment	ATC's Response
5	<i>Appendix A: HERO recommends revising the following items in the conceptual site model: (a) the "Air/Soil Vapor" inhalation pathway should be incomplete in accordance with the discussion in Section 5.2.4; and (b) the "Surface Water" dermal contact pathway should be incomplete for consistency with the discussion in Section 5.2.3.</i>	The recommended changes to the Site Conceptual Model have been made.
6	<i>Page 8: HERO's previous comment to recommend a PEF default value of $1 \times 10^6 \text{ m}^3/\text{kg}$ is for construction worker only, as the calculated value of $1.36 \times 10^9 \text{ m}^3/\text{kg}$ is appropriate for the other receptors evaluated in the PEA Report. While the findings of the human health risk evaluation remain unchanged with the use of default PEF value to the other receptors, HERO recommends clarifying the text to indicate that the use of default PEF value for construction worker to all receptors results in more conservative (i.e., higher) risk estimates for dust inhalation.</i>	The text was revised as requested.
7	<i>C-13: The title should be changed to "Inhalation of Fugitive Dust - Student" instead of "Inhalation of Fugitive Dust - Site Worker" to avoid confusion.</i>	The title of Table C-13 has been revised as requested.

PRELIMINARY ENDANGERMENT ASSESSMENT REPORT

PROPOSED ELEMENTARY AND MIDDLE SCHOOLS

**SOUTHEAST CORNER OF DORIS AVENUE AND NORTH PATTERSON ROAD
OXNARD CALIFORNIA 93030**

Submitted to:
Scarlett Zhai, PhD.
Department of Toxic Substance Control
Schools Evaluation and Brownfield Cleanup
Cypress Regional Office
796 Corporate Avenue
Cypress, California 90630

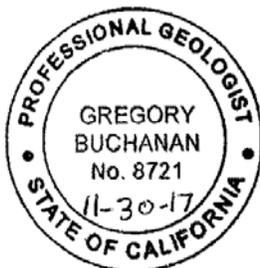
Submitted by:
ATC Group Services
25 Cupania Circle
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323-517-9780

March 29, 2017

Reviewed by:



Greg Buchanan, P.G.
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For ATC Group Services
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Approved by:



Todd Stanford, REHS, CEM
Principal Scientist
for ATC Group Services
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Figure 2 Site Plan with Assessment Locations

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Table 1 Laboratory Summary – Soil Analytical Data: OCPs and Arsenic
Table 2 Laboratory Summary – Methane and Hydrogen Sulfide
Table 3 Laboratory Summary – Equipment Blank Samples

APPENDICES

Appendix A Site Conceptual Model
Appendix B Laboratory Analytical Reports and Chain-of-Custody Documentation
Appendix C Human Health Screening Evaluation Supporting Calculations (Tables C-1 through C-25)
Appendix D Ecological Screening Evaluation

EXECUTIVE SUMMARY

The property located at the southeast corner of Doris Avenue and Patterson Road consists of a rectangular-shaped, 25-acre parcel of land, which is currently utilized as an agricultural field. The Oxnard School District (OSD) is planning to develop the site into a elementary and middle schools. This Preliminary Endangerment Assessment (PEA) report was prepared for the site as required by the Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup Division.

The site is currently an actively farmed agricultural field. Cardno ATC (now ATC) prepared a *Phase I Environmental Site Assessment* (ESA) report for the site, dated March 5, 2014. In the report, ATC identified historical usage of the site for agricultural purposes from at least 1940 to the present. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, where a 550-gallon and a 3,000-gallon gasoline-containing underground storage tank (UST) were present. The site received regulatory closure in 1998. The Phase I report concluded that the LUST site does not represent a *Recognized Environmental Condition* (REC) to the subject property. No other onsite or offsite RECs were reported in the Phase I ESA.

In December of 2016, ATC advanced soil borings SB-1 through SB-36 to 2.5 feet below ground surface (bgs) in a grid pattern across the site. Soil samples were collected using a hand auger, and stored in eight-ounce jars.

The 36 soil samples collected from 0 to 0.5 feet bgs for OCP analysis (EPA Method 8081A) were combined in the laboratory from four adjacent soil samples, for a total of nine composite samples and one duplicate sample. The 36 soil samples collected from 2 to 2.5 feet bgs were placed on hold in the laboratory pending analysis of the surface samples. Toxaphene was the only pesticide compound that exceeded its Regional Screening Level (RSL) for residential properties. Due to detection of various OCPs in the 0 to 0.5-foot composite samples, the two-foot composite samples were also analyzed. Toxaphene was detected at lower concentrations in the two-foot samples compared to the 0.5-foot samples.

Nine discrete non-contiguous soil samples and one duplicate were analyzed for arsenic using EPA Method 6010B. The soil samples exceeded the Regional Screening Level (RSL) for residential properties. However, arsenic results did not exceed the DTSC-suggested background screening level of 12 milligrams per kilogram (mg/kg).

Soil vapor samples were collected from ten direct-push boring locations at five and 10 feet bgs, respectively. Samples were collected following applicable DTSC and Regional Water Quality Control Board (RWQCB) protocols for soil vapor surveys. The vapor samples were analyzed for methane using EPA Method 8015M. A maximum of 15.26 parts per million by volume (ppmv) was detected near the northeastern corner of the site. This is equivalent to approximately 0.03 percent of the Lower Explosive Limit (LEL), and is not considered to be a hazard to the site.

Each vapor sample was tested for hydrogen sulfide using a hand-held field instrument. No hydrogen sulfide was detected in soil gas at the site.

A Human Health Screening Evaluation was performed using soil sample results from the December 2016 site assessment. The assessment evaluated potential soil exposures associated with four potential receptors, including the hypothetical future resident, future site worker, future site student, and construction worker. Estimated upper-bound hazard indices ranged from 0.014 for the site worker scenario to 0.2 for the residential scenario. The results of the risk assessment indicated that the presence of OCPs in soil is not expected to result in adverse, non-cancer health impacts to any of the potential receptors evaluated.

Estimates of potential cumulative upper-bound lifetime incremental cancer risks ranged from 6.3×10^{-6} for the hypothetical future resident to 2.6×10^{-7} for the construction worker scenarios. Upper-bound lifetime incremental cancer risk estimates for the school site receptors ranged from 1.3×10^{-6} to 6.9×10^{-7} for the site worker and student, respectively. The lifetime incremental cancer risk estimate for the hypothetical

residential receptor exceeds the point of departure of 1×10^{-6} typically utilized by DTSC to determine whether a removal action is warranted to protect human health for unrestricted land uses. The lifetime incremental cancer risk estimates for the site worker, site student, and construction worker are consistent with or below the 1×10^{-6} point of departure. Based on the results of the risk , the concentrations of OCPs, including toxaphene, detected in soil samples collected during this investigation do not present a significant risk to future site workers, students or construction workers. Consequently, no additional mitigation or risk management measures would be warranted for the proposed development and use of the property as a school site.

A land use covenant agreement limiting the future use of the site for non-residential purposes, would be an appropriate risk management option. In general, the vertical extent of toxaphene in soil appears to be limited to the first few feet below ground surface. The limited vertical extent of toxaphene is consistent with the historical application of this now banned pesticide. While the concentrations of toxaphene and other OCPs detected in soil are not anticipated to result in adverse impacts to future site workers, students, or construction workers, ATC recommends that a Soil Management Plan be prepared prior to initiating site development activities. The Soil Management Plan would outline procedures for dust mitigation during earth moving and soil disturbing activities, identify specific health and safety considerations, and establish procedures for monitoring, sampling, and disposal or import of soil utilized during construction.

ATC suggests that the proposed school site be designed to further minimize the potential for direct-contact with OCP impacted soil. Representative measures may include, but are not necessarily limited to, import of clean, documented fill material for use in planters, playgrounds, and playing fields within the first foot of ground surface, and removing topsoil from planned playfield areas for use beneath asphalt-covered areas. These additional measures would serve to further reduce and/or eliminate exposures to residual OCPs in soil.

1.0 SITE DESCRIPTION

The property is located at the southeast intersection of Doris Avenue and North Patterson Road in Oxnard, California (**Figure 1**). The site is a 25-acre rectangular-shaped parcel part of a larger 107.99 acre parcel which is identified by Ventura County's Assessor's Parcel Number (APN) 183-0-070-090. The site is currently utilized as agricultural land with no onsite structures.

The surrounding area is agricultural and residential, with residences to the north of Doris Avenue and agricultural land to the east, south and west.

2.0 BACKGROUND

The site has been used for agriculture purposes from at least the 1940's to the present. The site is currently used to produce row crops. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, where a 550-gallon and a 3,000-gallon gasoline-containing underground storage tank (UST) were present. The UST site received regulatory closure in 1998. OSD intends to construct elementary and middle schools on the property. In May of 2016, the District entered into an Environmental Oversight Agreement with the DTSC. The fieldwork was completed in general accordance with the *Interim Guidance for Sampling Agricultural Properties* (Third Revision), dated August 7, 2008(a), and discussion with DTSC case workers in September of 2016.

2.1 Geology and Hydrogeology

The site is located in the Oxnard Subbasin of the Santa Clara River Valley Groundwater Basin. The basin is bounded on the north by the Oak Ridge Fault, on the south by the Santa Monica Mountains, on the east by the Pleasant Valley and Las Posas Valley Basins, and on the west by the Pacific Ocean.

The central part of the basin is overlain by Recent Alluvium. Water-bearing sediments are beneath the Recent and Pleistocene soils. Groundwater flow is generally south-southwest (Department of Water Resources, 2003). The site is approximately 40 feet above mean sea level and the land surface slopes gently to the south (USGS, 1996). Groundwater was encountered at approximately 12 feet bgs during this investigation.

3.0 APPARENT PROBLEM

Historical and current use of the property have been for agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in the surface soils. Based on the fact that future development of the property includes planned school sites, large areas of the site are scheduled to be disturbed by demolition, grading, and reconstruction. These activities may result in the completion of ingestion, inhalation, and dermal exposure pathways via wind-blown dust, soil carried to different parts of the site by heavy equipment, and adhesion to site worker clothing. A Site Conceptual Model indicating the potential exposure pathways is provided in **Appendix A**.

4.0 SITE ASSESSMENT ACTIVITIES

As proposed in ATC's *PEA Workplan –Proposed Elementary and Middle Schools*, dated September 30, 2016 (ATC, 2016), a total of 46 borings were advanced at the site (SB-1 through SB-36, and SV-1 through SV-10). Soil samples were submitted to Positive Lab Service for analysis, and the soil vapor samples were analyzed in a mobile laboratory provided by Optimal Technology.

The completed scope of work is intended to address the concerns outlined in Section 3.0. ATC's justification for the locations and sampling depths selected, as well as the analyses performed are presented below:

- **To address potential concerns related to historical agricultural use at the site**, ATC advanced 36 soil borings (SB-1 through SB-36), with soil samples collected at 0.5 feet and 2.0 feet bgs at each location. The collected samples were composited in a 4:1 ratio and analyzed for OCPs. A total of nine discrete samples were also analyzed for arsenic. To determine the appropriate sampling approach, ATC reviewed the DTSC's *Interim Guidance for Sampling Agricultural Properties*. Approximately the same number of samples were proposed as recommended in the DTSC's guidance, but with samples collected at 0.5 and 2.0 feet bgs would be an appropriate approach.
- **To address potential concerns related to proximity to oil fields**, ATC advanced 10 soil vapor borings (SV-1 through SV-10), with vapor samples collected at 5 feet and 10 feet bgs at each location. The vapor samples were analyzed for the presence of methane and hydrogen sulfide.

A more in-depth discussion of the work performed by ATC is presented below.

4.1 Pre-Field Activities

A Site Health & Safety Plan (HASP) was prepared for the proposed activities to establish the personal health and safety procedures of ATC employees performing work at this location. The program satisfies the requirements promulgated by the Occupational Safety and Health Administration (OSHA). As part of the HASP, ATC personnel are appropriately trained and under a Medical Surveillance Program in accordance with OSHA 40 CFR 1910.120.

Prior to sampling activities, Underground Service Alert (USA) was contacted for the purpose of notifying utility companies with subsurface lines in the site area. No subsurface utilities were present near the sampling locations.

4.2 Soil Sampling

On December 14, 2016, ATC advanced 36 soil borings (SB-1 through SB-36) at the site using a hand auger. The soil boring locations are shown on **Figure 2**. The soil borings were advanced to a maximum depth of 2.5 feet bgs. Sampling equipment was decontaminated using a three-stage wash/rinse with Alconox® (or equivalent) between each interval of sampling. A duplicate soil sample was collected for each laboratory analysis being performed. The samples were contained in non-preserved glass jars, labeled, placed in an ice-chilled cooler, and delivered to Positive Lab Service for analysis. The collected soil samples were analyzed for OCP's using EPA Method 8081A, and for arsenic using EPA Method 6010B.

4.3 Soil Vapor Sampling

On December 13, 2016, ATC observed Cascade Drilling (Cascade) advance soil borings SV-1 through SV-10 at the site. Groundwater was encountered at 12 feet bgs. A DTSC onsite representative recommended vapor probes be set at five and 10 feet bgs in each boring.

On December 15, 2016, ATC observed Optimal Technologies (Optimal) collect soil vapor samples from SV-1 through SV-10. At each sampling location, an electric vacuum pump set to draw 0.2 liters per minute (L/min) of soil vapor was attached to the probe and purged prior to sample collection. Vapor samples were obtained in gas-tight syringes using a three-way swage-lock valves and tubing which connects the sampling probe and the vacuum pump. New tubing was used at each sampling point to prevent cross-contamination.

Soil vapor samples were analyzed in an onsite mobile laboratory for methane using EPA Test Method 8015, and for hydrogen sulfide using a hand-held field instrument (Landtec GEM2000 Plus).

A replicate analysis (duplicate) was performed to evaluate the reproducibility of the sampling system and instrument. Blanks were run at the beginning of the day and after calibration. The blanks were collected using ambient air sample. The blanks checked the septum, syringe, gas chromatography (GC) Column, GC detector, and the ambient air. Blank results are provided with the sample results.

A tracer compound (isobutane) was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points included the top of the sampling probe where the tubing meets the probe connection, and the surface bentonite seals. None of the collected soil vapor samples contained detectable concentrations of isobutane, suggesting ambient air did not dilute the collected samples.

All sampling equipment was decontaminated between boring and sample locations. Following completion of the sampling activities, each boring was subsequently destroyed in accordance with State Water Resources Control Board regulations.

Soil vapor locations are shown on **Figure 2**.

4.4 Analytical Results

Laboratory analytical results for collected soil and soil vapor samples are discussed below and summarized on **Tables 1 and 2**. Copies of the laboratory analytical reports are provided in **Appendix B**.

Historical Agricultural Use Concerns

Soil borings SB-1 through SB-36 were analyzed to evaluate potential contamination of soils extending to a depth of 0.5 feet bgs for OCPs and arsenic related to historical agricultural usage of the site. Nine discrete soil samples were analyzed for arsenic, while soil samples collected for OCP analysis were combined into four-point composite samples (COMP 1 through COMP 9) at each depth (soil was not composited across multiple depths).

The OCPs alpha and gamma-chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, methoxychlor, dieldrin, and endrin, were detected below their respective Regional Screening Levels (RSL's) in the composite soil samples collected at 0.5 feet (COMP 1 through COMP 9). Toxaphene was detected above its RSL in all nine samples plus the duplicate, at a maximum concentration of 2,510 µg/kg in sample COMP 9. Due to the toxaphene detections above its respective RSL, ATC instructed the laboratory to analyze the two-foot depth samples. Toxaphene was detected below its RSL in five of the nine soil samples, and at concentrations less than the corresponding 0.5-foot samples in the remaining four composite two-foot depth samples.

Arsenic was detected in all of the collected soil samples at concentrations ranging from 3.01 to 3.76 mg/kg. It is ATC's opinion that the arsenic concentrations in soil samples collected appear to represent naturally-occurring background concentrations. The DTSC-accepted background concentration for arsenic in the Southern California Region is 12 mg/kg (DTSC, 2008b).

4.4.1 Soil Vapor Results

The site is located within the eastern portion of the West Montalvo Oil Field. There are no current or historic oil production wells located within 1,500 feet of the site. In order to assess potential concerns related to historical oil field production activities in the West Montalvo Oil Field, ten soil vapor probes (SV-1 through SV-10) were advanced to 10 feet bgs. Soil vapor samples were collected from each soil vapor probe at depths of 5 and 10 feet bgs. Methane was detected in soil vapor samples collected at 5 feet bgs in four vapor probes (SV-2, SV-3, SV-5, and SV-9) at concentrations ranging from 10.28 to 15.26

ppmv. Methane was detected in one soil sample collected at a depth of 10 feet bgs (SV-4) at a concentration of 14.22 ppmv. The concentrations of methane detected in soil vapor are less than 0.03% of the lower explosive limit (LEL). Hydrogen sulfide was not detected in any of the soil vapor samples collected at the site. These observations suggest that the methane and hydrogen sulfide potentially associated with the West Montalvo Oil Field do not pose a significant threat to future building occupants and do not warrant additional mitigation.

4.5 Quality Assurance/Quality Control

The samples collected for this PEA investigation were submitted to Positive Lab Service of Los Angeles, California for analysis.

The field data and analytical data were reviewed to attempt to ensure that the field measurements and quality control analyses were properly performed and documented. The field data sheets and chain of custodies were reviewed for completeness and accuracy.

One duplicate sample and one equipment blank sample were collected for this scope of work. The percentage difference between samples and duplicates was within acceptable ranges. The equipment blank sample was non-detect for all tested analytes, as summarized on **Table 3**.

Surrogate recoveries were within the acceptance criteria and all sample batches were generally within the acceptable range for matrix spike and/or matrix spike duplicate results in the laboratory. Any discrepancies were discussed and addressed by the laboratory. Proper sampling, chain-of-custody, and cooling protocols were conducted throughout the investigation.

Based on the quality assurance/quality control analysis, the results are consistent with proper field and laboratory results observed in similar field conditions.

As reported by the laboratory, analysis of the two-foot depth samples was two days outside holding time. The analysis was requested over the Holidays.

All laboratory analytical reports, including QA/QC analysis, are included in **Appendix B**.

5.0 HUMAN HEALTH SCREENING EVALUATION

5.1 Introduction

The PEA screening evaluation for human health effects involves identifying potential chemicals of concern, and comparing a calculated dose for these chemicals to health-based levels developed by EPA and DTSC. For the purpose of the PEA screening evaluation, potential exposures, doses, and risks were evaluated for four potential onsite receptors, including hypothetical resident, future school worker, future student, and construction worker exposure scenarios. For the purpose of this analysis, the human health screening evaluation was performed utilizing data obtained from the December 2016 site assessment.

Exposure to chemicals can only occur if there is a complete pathway by which chemicals in site soil, water, or air can be contacted by humans. Therefore, the evaluation of exposure pathways is the first step in the human health screening evaluation. Potential dose and risk are then calculated based on an evaluation of potential exposure concentrations of chemicals of concern, and the toxicity of the chemicals. The findings of the human health screening evaluation are summarized in the risk characterization summary. The uncertainty section presents factors in the risk assessment that may result in an overestimation or underestimation of risk for risk management consideration. Risk and hazard estimates based on the use of the maximum detected concentrations of constituents in soil are also presented in the discussion of uncertainty.

5.2 Exposure Pathways and Media of Concern

5.2.1 Conceptual Site Model

As discussed in Section 2.0, the site has been used for agriculture purposes since at least the 1940s and is currently used to produce row crops. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, where a 550-gallon and a 3,000-gallon gasoline-containing underground storage tank (UST) were present. The UST site received regulatory closure in 1998. The OSD intends to construct elementary and middle schools on the property. In May of 2016, the OSD entered into an Environmental Oversight Agreement with the DTSC. While specific plans and details regarding the proposed facilities have not been prepared, ATC anticipates that the development will include construction of buildings, parking lots, playfields, hardcourts, and common space areas.

Following development, it is anticipated that only limited portions of the site would be exposed and available for contact by future students and school workers. The potential for direct contact with soil under anticipated future site conditions is expected to be minimal. Consistent with agency guidance for baseline risk assessments, it was assumed that the site will be uncovered and that bare soils will be available for contact for the purpose of the screening human health evaluation. Consequently, children attending the school, certain school staff, and workers engaged in construction activities could potentially be exposed to site chemicals through incidental ingestion, dermal contact, and inhalation of vapors and particulates from chemicals in soil. In accordance with PEA guidance, exposures to chemicals at the site were evaluated assuming hypothetical residential exposures. Potential school staff, students, and construction worker exposures were also evaluated for the same exposure pathways.

The conceptual site model (CSM) for the site is included in **Appendix A**.

5.2.2 Soil Exposure Pathways

Chemicals detected in soil at the site include OCPs and arsenic. While the post-development conditions (i.e., presence of flatwork and buildings over the majority of the site surface) would serve to limit the frequency or duration of potential soil exposure pathways, potential contact with soil by students, staff, and or construction workers may occur in the future. For chemicals in soil, potentially complete exposure pathways include dermal contact with soil and incidental ingestion of soil.

5.2.3 Water Exposure Pathways

The shallow groundwater is not a current or proposed source of drinking water for the site. Therefore, the groundwater exposure pathway is considered to be an incomplete exposure pathway for the purpose of this screening health risk assessment. No permanent surface water bodies occur on the site or in the near vicinity of the site. Therefore, exposures to surface water were not evaluated.

5.2.4 Air Exposure Pathways

For chemicals in soil, potential exposure may occur as a result of particulate erosion from the soil surface and subsequent suspension of particulates in air. This process and the resulting exposure is often referred to as the fugitive dust exposure pathway. The site is currently undeveloped and future site grading and construction activities could result in the generation of fugitive dust. In addition, it is anticipated that relatively small areas of the site will be reserved for open play areas that could potentially result in the generation of fugitive dust. Based on this information, potential exposures to chemicals through the fugitive dust pathway warrant quantitative evaluation for the chemicals of potential concern (COPCs) at the site.

The results of soil vapor sampling performed at the site did not indicate the presence of methane or hydrogen sulfide at concentrations that would represent a vapor intrusion threat or a risk of fire or

explosion. Consequently, potential exposure to methane and hydrogen sulfide in indoor and outdoor air are not considered to represent complete exposure pathways at this time.

5.2.5 Summary of Selected Exposure Pathways

For the purpose of this PEA screening evaluation, receptors including a hypothetical resident, future school worker, future student, and construction worker were assumed to be exposed to organochlorine pesticides in site soil through direct dermal contact, incidental ingestion, and inhalation of airborne particulates (i.e. fugitive dust).

5.3 Selection of Chemicals of Potential Concern

Chemicals of Potential Concern (COPCs) include constituents that are present in soil that may result in adverse health effects under the defined conditions of exposure. The PEA sampling activities included analysis for arsenic, a naturally-occurring element that may also be associated with historical arsenic-based pesticides, and organochlorine pesticides (OCPs). **Table 1** summarizes the laboratory analytical results for arsenic and OCPs detected in soil at the site. **Appendix C, Table C-1** presents the same data but also includes a descriptive statistical summary of the COPCs that were detected in soil samples obtained as a component of the PEA investigation. Specifically, **Table C-1** includes a summary of the number of soil samples analyzed (including duplicates), frequency of detection, range of non-detect values, minimum and maximum detected concentrations, and the arithmetic mean for each chemical detected.

Arsenic detected in soil was evaluated to determine if the concentrations detected were consistent with “background” conditions (i.e., conditions unaffected by site-related activities). Arsenic was detected in soil at concentrations ranging from 3.01 to 3.76 mg/kg. The concentrations of arsenic are below the DTSC established background screening value of 12 mg/kg (DTSC, 2008b). Based on this information, arsenic is considered to be present at concentrations within the range of anticipated background concentrations and was excluded from quantitative analysis in the screening health risk assessment.

All other COPCs that were detected in soil for which relevant toxicological evaluations have been performed were retained for quantitative analysis in the screening health risk assessment.

The concentrations of COPCs at specific exposure points will vary over space and time. However, a single estimate of an Exposure Point Concentration (EPC) is required for risk assessment calculations (USEPA, 1989). This single value must be representative of the average concentration to which a person would be exposed over the duration of the exposure. EPCs generally are estimated using either measured concentrations in environmental media or developed using fate and transport models. For COPCs in soil, the maximum concentration of each COPC detected in soil was utilized to represent the EPC in this analysis. Use of the maximum concentration as the basis for the EPC represents a conservative and health-protective assumption and is consistent with DTSC guidance for PEA screening evaluations.

5.4 Exposure Parameters

Exposure parameters are quantitative estimates of the frequency, duration, and magnitude of exposure to soil based on information contained in DTSC and USEPA guidance, as well as professional judgment. The exposure parameters were selected from DTSC (2014) and USEPA (2009 and 2011) guidance. **Appendix C, Table C-2** presents the exposure assumptions that were used in this screening health risk assessment for the residential receptor, occupational worker, and construction worker.

5.4.1 Common Exposure Parameters

The exposure frequency represents the number of days a year a receptor may be expected to be exposed to COPCs. The exposure frequency for residential receptors is 350 days per year, which is assumed to be 7 days per week for 50 weeks per year (DTSC, 2014). The exposure frequency for the site worker and student is assumed to be 180 days per year, consistent with a typical school schedule. The exposure frequency for the construction worker is 250 days per year, which assumes 5 days per week for 50 weeks per year (DTSC, 2014).

The exposure duration for child residential receptors is 6 years and for an adult resident is 20 years (DTSC, 2014). The exposure durations for the site worker and construction worker are 25 years and 1 year, respectively (DTSC, 2014). The exposure duration for the student was assumed to be 9 years, representing attendance from kindergarten through 8th grade (i.e., from age 5 through age 13). The average body weight for an adult receptor is 80 kilograms (kg) and for a child resident is 15 kg (DTSC, 2014). An average body weight of 35 kg was assumed for the student receptor. This value represents the average body weight of a student between the ages of 5 and 14 (OEHHA, 2004).

The averaging time parameter averages exposure over a period of time. For non-carcinogenic effects, the averaging time is based on the exposure duration multiplied by 365 days per year. The averaging time for non-carcinogenic effects for a child residential receptor is 2,190 days, for an adult residential receptor is 7,300 days, for a site worker is 9,125 days, and for a construction worker is 365 days (DTSC, 2014). The averaging time for non-carcinogenic effects for the student receptor is 3,285 days, reflecting a nine year period of attendance. The averaging time for carcinogenic effects is based on a lifetime exposure of 70 years multiplied by 365 days/year for 25,550 days (DTSC, 2014). When calculating carcinogenic risk, the total intake of a chemical over a lifetime is used. For the residential exposure scenario, the total chemical intake includes the sum of the intake for 6 years as a child and 20 years as an adult.

5.4.2 Inhalation Exposure Parameters

The exposure time represents the amount of time in a day that a receptor may be exposed to either fugitive dust via inhalation, ambient air, or indoor air. The exposure time for a residential receptor assumes a full day (24-hour) exposure. The exposure time for site worker, student, and construction worker assumes an 8 hour day (DTSC, 2014).

5.4.3 Incidental Soil Ingestion Exposure Parameters

The ingestion rate represents the amount of soil a receptor may accidentally ingest in a day at the site. The ingestion rate for an adult residential receptor is 100 milligrams per day (mg/day) and 200 mg/day for a child resident. The student soil ingestion rate utilized in this analysis is 72 mg/day. This value reflects the average soil ingestion rate based on the fraction of time spent at school (59%) and the age-specific soil ingestion rates of 200 mg/day for ages 5 and 6 and 100 mg/day for ages 7 through 14 (OEHHA, 2004). The ingestion rate for an occupational worker assumes 100 mg/day, and a construction worker is 330 mg/day (DTSC, 2014).

5.4.4 Dermal Contact with Soil Exposure Parameters

The skin surface area represents how much skin is exposed for dermal contact with soil. The surface area is 6,032 square centimeters (cm²) for the adult residential receptor, site worker, and construction worker and 2,900 cm² for a child residential receptor (DTSC, 2014).

The soil-to-skin adherence factor represents how much soil will remain on the skin after direct contact with the soil is no longer available. The soil-to-skin adherence factor is 0.2 milligrams per square centimeter per day ($\text{mg}/\text{cm}^2\text{-day}$) for the child resident, site worker and student receptors (DTSC, 2014). Soil-to-skin adherence factors of 0.07 and 0.8 $\text{mg}/\text{cm}^2\text{-day}$ were used for the adult residential receptor and construction worker, respectively (DTSC, 2014).

5.4.5 Particulate Emission Factor

The particulate emission factor (PEF) relates the contaminant concentration in soil with the concentration of respirable particles in the air due to fugitive dust emissions from the surface of the site (USEPA, 1991b). DTSC recommended a PEF default value of $1 \times 10^6 \text{ m}^3/\text{kg}$.

- For the purpose of this analysis, default assumptions recommended by EPA and DTSC were used along with the default PEF. The calculations are provided in **Appendix C, Table C-4**. **The use of default PEF value for construction worker to all receptors results in more conservative (i.e., higher) risk estimates for dust inhalation.**

5.5 Toxicity Values and Summary Tables

The toxicity assessment characterizes the relationship between the magnitude of exposure to a COPC and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects endpoints are classified into two broad categories: non-carcinogenic and carcinogenic. Toxicity values/exposure criteria are generally developed based on the threshold approach for non-carcinogenic effects and the non-threshold approach for carcinogenic effects. Toxicity values may be based on epidemiological studies, short-term human studies, or subchronic or chronic animal data.

5.5.1 Carcinogenic Effects

In human health risk assessment, a slope factor is used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime of exposure to a particular level of a potential carcinogen. Specifically, a slope factor is a plausible upper-bound estimate of the probability of a response per unit intake of a chemical over a lifetime and is usually the 95% Upper Confidence Limit (UCL) of the slope of the dose-response curve expressed in $(\text{mg}/\text{kg}\text{-day})^{-1}$ for non-inhalation pathways and $(\mu\text{g}/\text{m}^3)^{-1}$ for inhalation pathways.

For carcinogenic COPCs, toxicity criteria were selected from the Office of Environmental Health Hazard Assessment (OEHHA) Toxicity Criteria Database. If no OEHHA toxicity criteria were available, toxicity criteria were selected from USEPA Integrated Risk Information System (IRIS) (EPA, 2017) or USEPA Regional Screening Level Table (USEPA, 2016). Carcinogenic toxicity criteria for the COPCs are presented in **Appendix C, Table C-3**.

5.5.2 Non-Carcinogenic Effects

For the evaluation of non-carcinogenic effects, chronic reference doses (RfDs) for the ingestion route and reference concentrations (RfCs) for the inhalation route are used. A chronic RfD, expressed in milligrams per kilogram per day or $\text{mg}/\text{kg}\text{-day}$, is an estimate of a daily exposure level for the human population, including sensitive subpopulations that are likely to be without appreciable risk of deleterious effects during a lifetime. The RfC is expressed in units of micrograms of chemical per cubic meter of air ($\mu\text{g}/\text{m}^3$) and is an estimate of the maximum air concentration that can be present over a specified time period without an appreciable risk of deleterious effects. Chronic reference doses and reference concentrations are

generally used to evaluate the potential non-carcinogenic effects associated with exposure periods between 6 years and a lifetime. Non-carcinogenic toxicity criteria for the COPCs are presented in **Appendix C, Table C-3**.

For non-carcinogenic COPCs, toxicity criteria were selected according to the following hierarchy of sources:

- The OEHHA's chronic reference exposure levels (RELs) or RfDs from the OEHHA Toxicity Criteria Database (OEHHA, 2017).
- The RfDs/RfCs from IRIS (USEPA, 2017).
- USEPA's Provisional Peer Reviewed Toxicity Values (PPRTVs), as provided for specific chemicals in the USEPA, Regional Screening Level Table (USEPA, 2016); and

When available, child-specific RfDs were utilized in this analysis. Child-specific RfDs were identified for chlordane and methoxychlor only. Other toxicity values, as provided for specific chemicals in the USEPA Regional Screening Level Table (USEPA, 2016). Other sources referenced in the USEPA tables include Minimal Risk Levels (MRLs) from the Agency for Toxic Substances Disease Registry (ATSDR); values from the National Center for Environmental Assessment (NCEA); values from New Jersey Department of Environmental Protection (NJDEP); and values from USEPA Health Effects Assessment Summary Tables (HEAST).

5.6 Risk Characterization Summary

In this section of the screening health risk assessment, toxicity and exposure assessments were integrated into quantitative expressions of non-carcinogenic hazards and carcinogenic risks. As was previously discussed, the exposure and risk assessment methodology utilized in this analysis accounts for potential exposure to all COPCs.

The estimates of hazard and risk for individual COPCs and exposure pathways are presented numerically in **Appendix C, Tables C-5 through C-16**. Summaries of the hazard quotients for the residential, site worker, student, and construction worker scenarios are presented in **Tables C-17, C-19, and C-21, and C-23**, respectively. Summaries of the lifetime incremental cancer risks for the residential, site worker, student, and construction worker scenarios are presented in **Tables C-18, C-20, C-22, and C-24**, respectively. **Table C-25** provides a summary of estimated cumulative hazard indices and lifetime incremental cancer risks for each potential receptor.

The following sections provide a summary overview of the cumulative hazard indices and lifetime incremental cancer risks associated with the exposure scenarios that were quantified as a component of this evaluation.

5.6.1 Non-Carcinogenic Health Effects

Potential non-carcinogenic effects are typically evaluated by comparing exposure over a specified time period with a reference dose derived for a similar exposure period. This ratio of exposure (dose or concentration) to toxicity is referred to as a Hazard Quotient (HQ). The HQ was calculated as follows for each COPC:

Inhalation Pathways:

$$HQ_i = \frac{AAC_i}{RfC_i}$$

Ingestion and Dermal Pathways:

$$HQ_i = \frac{ADD_i}{RfD_i}$$

where:

HQ_i = Hazard quotient for chemical "i" (unitless);
AAC_i = Average air concentration for chemical "i" (µg/m³);
RfC_i = Inhalation reference concentration for chemical "i" (µg/m³);
ADD_i = Average daily dose for chemical "i" (mg/kg); and
RfD_i = Reference dose for chemical "i" (mg/kg).

In cases where individual COPCs potentially act on the same organs or result in the same health endpoint (e.g., respiratory irritants), potential additive effects may be addressed by calculating a hazard index (HI) as follows:

$$HazardIndex = \sum_{i=1}^n HazardQuotient_i$$

where: i = specific health endpoint

A HI or HQ (for effects which are not additive) of less than or equal to 1 (referred to herein as the significance threshold) indicates acceptable levels of exposure for COPCs having an additive effect. In this analysis, a HI was calculated by summing the HQs for all COPCs, regardless of toxic endpoint, as recommended by agency guidance (USEPA, 1989). This approach is generally believed to overestimate the potential for non-carcinogenic health effects due to simultaneous exposure to multiple chemicals because it does not account for different toxic endpoints (USEPA, 1989).

It should be noted that HQs or HIs greater than 1 do not necessarily mean that adverse health effects will be observed. A substantial margin of safety has been incorporated into some of the RfDs and RfCs developed for the COPCs. Therefore, for these chemicals, adverse health effects may not be observed even if the HQ or HI is much larger than 1.

The following paragraphs summarize the results of the non-carcinogenic risk characterization for each receptor evaluated. The non-cancer hazards estimated for each chemical and exposure pathway evaluated are presented in **Appendix C, Tables C-14, C-16, and C-18** for the residential, occupational worker, and construction worker, respectively.

Residential Receptor

The non-cancer HQs and HIs associated with potential exposure by the hypothetical onsite residential receptors are summarized in **Table C-17**. Non-cancer HQs for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in **Tables C-5** (Incidental Ingestion), **C-6** (Dermal Contact), and **C-7** (Inhalation of Fugitive Dust). The non-cancer HI for hypothetical residential receptors exposed to all of the COPCs in soil at the site is 0.2. This value is below the acceptable HI of 1.0. Consequently, potential exposure to the COPCs in soil would not be expected to result in adverse non-cancer health effects for this receptor.

Site Worker

The non-cancer HQs and HIs associated with potential exposure by onsite occupational workers are summarized in **Table C-19**. Non-cancer HQs for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust air are presented in **Tables C-8** (Incidental Ingestion), **C-9** (Dermal Contact), and **C-10** (Inhalation of Fugitive Dust). The non-cancer HI for site workers potentially exposed to all of the COPCs in soil at the site is 0.014. This value is below the acceptable HI of 1.0. Consequently, potential exposure to the COPCs in soil would not be expected to result in adverse non-cancer health effects for this receptor.

Student

The non-cancer HQs and HIs associated with potential exposure by students are summarized in **Table C-21**. Non-cancer HQs for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust air are presented in **Tables C-11** (Incidental Ingestion), **C-12** (Dermal Contact), and **C-13** (Inhalation of Fugitive Dust). The non-cancer HI for students potentially exposed to all of the COPCs in soil at the Site is 0.019. This value is below the acceptable HI of 1.0. Consequently, potential exposure to the COPCs in soil would not be expected to result in adverse non-cancer health effects for this receptor.

Construction Worker

The non-cancer HQs and HIs associated with potential exposure by an onsite construction worker are summarized on **Table C-23**. Non-cancer HQs for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in **Tables C-14**, **C-15**, and **C-16**, respectively. The non-cancer HI for construction workers exposed to all of the COPCs in soil at the site is 0.067. This value is below the acceptable HI of 1.0. Consequently, potential exposure to the COPCs in soil would not be expected to result in adverse non-cancer health effects for this receptor.

5.6.2 Carcinogenic Health Effects

Carcinogenic risks are estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a potential carcinogen. The slope factor (SF) converts estimated daily intakes averaged over a lifetime of exposure to incremental risk of an individual developing cancer (USEPA, 1989). This carcinogenic risk estimate is generally an upper-bound value since the slope factor is often a 95% UCL of probability of response based on experimental animal data. For inhalation exposures, the Inhalation Unit Risk (IUR) is used to estimate an upper-bound probability of an individual developing cancer as a result of a lifetime exposure. The IUR is a concentration-based estimate of carcinogenic potency and is expressed as risk over time ($\mu\text{g}/\text{m}^3$). Lifetime Incremental Cancer risks for COPCs were calculated as follows:

Inhalation Pathways:

$$CR_i = LAC_i \times IUR_i$$

Ingestion and Dermal Pathways:

$$CR_i = LDD_i \times SF_i$$

where:

- CR_i = Lifetime Incremental Cancer risk for chemical "i" (unitless);
- LAC_i = Lifetime air concentration for chemical "i" (µg/m³);
- IUR_i = Inhalation unit risk factor for chemical "i" (µg/m³)⁻¹;
- LDD_i = Lifetime daily dose for chemical "i" (mg/kg-day); and
- SF_i = Slope factor for chemical "i" (mg/kg-day)⁻¹.

The estimated excess cancer risks for each chemical are summed regardless of toxic endpoint to estimate the total excess cancer risk for the exposed individual:

$$CR = \sum_{i=1}^n CR_i$$

where: i = specific health endpoint

The USEPA and CalEPA have defined what is considered to be an acceptable level of risk in similar, though slightly different ways. The USEPA considers one in one-million (1×10⁻⁶) to one in ten thousand (1×10⁻⁴) to be the target range for acceptable risk (USEPA, 1990a, 1990b). Estimates of lifetime excess cancer risk associated with exposure to chemicals of less than 1×10⁻⁶ are considered *de minimis*, a risk level that is so low as to not warrant any further investigation or analysis (USEPA, 1990a). The DTSC also generally targets the same range for acceptable risks, but typically utilizes the 1×10⁻⁶ risk estimate as the point of departure for current or prospective school sites.

The following sections summarize the results of the carcinogenic risk characterization for each receptor evaluated. The lifetime incremental cancer risks estimated for each chemical and exposure pathway evaluated are presented in **Appendix C, Tables C-18, C-20, C-22, and C-24** for the residential, site worker, student, and construction worker receptors, respectively.

Residential Receptor

The cancer risks associated with potential exposure by the onsite residential receptors are summarized on **Table C-18**. Cancer risks for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in Tables **C-5, C-6, and C-7**, respectively.

The upper-bound cumulative lifetime incremental cancer risks for residential receptors potentially exposed to all of the COPCs in soil at the Site is 6.3 x 10⁻⁶. Approximately 86% of the lifetime incremental cancer risk estimate is associated with incidental ingestion of soil. Toxaphene accounts for approximately 80% of the cumulative lifetime incremental cancer risk estimate. The calculated lifetime incremental cancer risk for this receptor is greater than 1 x 10⁻⁶. This finding suggests that under current conditions, the site would not be suitable for residential or unrestricted uses.

Site Worker

The upper-bound cumulative lifetime incremental cancer risks associated with potential exposure by site workers are summarized on **Table C-20**. The upper-bound cumulative lifetime incremental cancer risks for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in **Tables C-8, C-9, and C-10**, respectively.

The upper-bound cumulative lifetime incremental cancer risks for the site worker potentially exposed to all of the COPCs in soil at the site is 1.3×10^{-6} . Approximately 62% of the lifetime incremental cancer risk estimate is associated with incidental ingestion of soil, while the balance of the risk estimate is associated with dermal contact with soil. Toxaphene accounts for approximately 80% of the cumulative lifetime incremental cancer risk estimate. The calculated lifetime incremental cancer risk for this receptor is consistent with the 1×10^{-6} point of departure and no additional action is warranted for this receptor.

Student

The upper-bound cumulative lifetime incremental cancer risks associated with potential exposure by an onsite student are summarized on **Table C-22**. The upper-bound cumulative lifetime incremental cancer risks for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in **Tables C-11, C-12, and C-13**, respectively.

The upper-bound cumulative lifetime incremental cancer risks for the student receptor potentially exposed to all of the COPCs in soil at the site is 6.9×10^{-7} . The calculated lifetime incremental cancer risk for this receptor is less than 1×10^{-6} . Consequently, potential exposures to future students do not warrant additional action.

Construction Worker

The upper-bound cumulative lifetime incremental cancer risks associated with potential exposure by an onsite construction worker are summarized on **Table C-24**. The upper-bound cumulative lifetime incremental cancer risks for incidental ingestion of soil, dermal contact with soil, and inhalation of fugitive dust are presented in **Tables C-14, C-15, and C-16**, respectively.

The upper-bound cumulative lifetime incremental cancer risks for construction worker receptor potentially exposed to all of the COPCs in soil at the site is 2.6×10^{-7} . The calculated lifetime incremental cancer risk for this receptor is less than 1×10^{-6} . Consequently, potential exposures associated with construction activities do not warrant additional action.

5.7 Uncertainty Analysis

There is a certain degree of uncertainty in estimating exposures to chemicals in the environment. To account for these uncertainties, the risk assessment methodology was designed to be conservative. Where values are uncertain because of a lack of site-specific data, regulatory agency default values and/or conservative values were used. Specific sources of conservatism associated with this screening health risk assessment are discussed below:

- The exposure point concentrations utilized in this assessment were based on the maximum concentration of a COPC detected in soil. Use of the maximum detected concentration as an exposure point concentration provides the highest plausible estimate of exposure and associated hazard or risk. Cumulative estimates of hazard and risk are considered to be theoretical and actual cumulative hazards and risks are likely to be lower than the values derived from this analysis.
- The exposure assessment performed as a component of this analysis incorporates a number of assumptions regarding the current or future presence of receptors and the frequency and duration of activities that may result in exposure to the receptors. The exposure factors utilized in calculating exposures and risks are intended to provide reasonable upper-bound estimates for the receptors and exposure pathways considered. While these assumptions are unlikely to underestimate exposure and risk, alternative assumptions based on average or most-likely conditions could yield lower estimates of exposure and risk. For example, the actual period of time that a residential receptor, site worker, or construction worker would be involved in direct

contact with soils is anticipated to be substantially less than the exposure frequency and duration utilized in this assessment.

- Some of the toxicity values utilized in this assessment involve the extrapolation of results from animal studies. When the results of these animal studies are extrapolated to humans, safety factors or other conservative assumptions are typically applied to ensure that human health effects are not underestimated. For carcinogenic effects, the risk assessment methodology assumes the absence of a threshold dose. In essence, this means that exposure to any quantifiable amount of a carcinogenic compounds would result in an estimated risk.
- Exposures and associated risks resulting from contact with multiple COPCs were conservatively assumed to be additive, without regard to specific health effects endpoints (e.g., target organs, tumor type, toxic endpoint, or mode of action). If the health effects endpoints were considered, the cumulative risks would be lower than the values presented in this assessment.
- Exposure point concentrations for COPCs in fugitive dust were estimated utilizing a standardized equation for wind erosion. While this approach is reasonable in the absence of suitable data derived from air sampling and gravimetric analysis, the actual concentrations of dust may be different. In general, the estimated concentrations of COPCs in fugitive dust predicted in this assessment are anticipated to be higher than the actual concentrations.
- Laboratory analytical data for all sampled OCPs included composite, rather than discrete samples. While the use of composite sample results could influence the statistical evaluation for specific COPCs, for the purpose of this analysis, the potential impact is not considered to be significant.
- This assessment presumes that all areas of the site would be potentially available for contact by the residents, site workers and construction workers. This assumption does not account for the future presence of engineered surfaces, buildings, or the presence of vegetation across the site that could serve to further reduce potential exposures or potentially eliminate certain exposure pathways.

6.0 ECOLOGICAL SCREENING EVALUATION

The DTSC requested an ecological screening evaluation of the active agricultural site where proposed elementary and middle schools are to be built. ATC contracted with Rincon Consultants (Rincon) of Ventura, California to perform the evaluation. Rincon concluded that no biologically sensitive resources were present at the site due to a lack of undisturbed natural habitat. A copy of the report is provided in **Appendix D**.

7.0 CONCLUSIONS

7.1 Soil Media

Shallow soil samples were collected in a grid pattern across the approximate 25-acre site. A total of 36 soil borings (SB-1 through SB-36) were advanced to maximum depths of two feet bgs, and composited into nine samples for both the 0.5 and 2.0 feet bgs sampling intervals. Two constituents, arsenic and toxaphene, were detected in soil at concentrations in excess of DTSC and/or EPA health-based screening levels for residential land use. Toxaphene was detected in shallow soil across the site at relatively consistent concentrations, and its presence appears to be related to historical agricultural applications. The concentrations of arsenic detected in soil were determined to be consistent with background concentrations of this naturally-occurring element.

Ten soil vapor probes (SV-1 through SV-10) were advanced to 10 feet bgs, and soil vapor samples were collected at depths of 5 and 10 feet bgs. Methane was detected in soil vapor samples collected at 5 feet bgs in four vapor probes (SV-2, SV-3, SV-5, and SV-9) at concentrations well below ten percent LEL. Hydrogen sulfide was not detected in any of the soil vapor samples collected at the site. These observations suggest that the methane and hydrogen sulfide potentially associated with the West Montalvo

Oil Field do not pose a significant threat to future building occupants and do not warrant additional mitigation.

A screening health risk assessment was performed for all OCPs detected in soil. The assessment evaluated potential soil exposures associated with three potential receptors, including the hypothetical future resident, site worker, and construction worker. Estimated upper-bound hazard indices ranged from 0.014 for the site scenario to 0.2 for the residential scenario. Cumulative hazard indices for the site student and construction worker were 0.019 and 0.067, respectively. The results of the risk assessment indicated that the presence of OCPs in soil is not expected to result in adverse, non-cancer health impacts to any of the potential receptors evaluated.

Estimates of potential cumulative upper-bound lifetime incremental cancer risks ranged from 6.3×10^{-6} for the hypothetical future resident to 2.6×10^{-7} for the construction worker scenarios. The lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} typically utilized by DTSC to determine whether a removal action is warranted to protect human health for unrestricted land uses. Upper-bound lifetime incremental cancer risk estimates for the school site receptors ranged from 1.3×10^{-6} to 6.9×10^{-7} for the site worker and student, respectively. The lifetime incremental cancer risk estimates for the site worker, site student, and construction worker are consistent with or below the 1×10^{-6} point of departure. Based on the results of the risk , the concentrations of OCPs, including toxaphene, detected in soil samples collected during this investigation do not present a significant risk to future site workers, students or construction workers. Consequently, no additional mitigation or risk management measures would be warranted for the proposed development and use of the property as a school site.

8.0 RECOMMENDATIONS

The results of the screening health risk assessment indicate that the lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} utilized by DTSC. In the event that unrestricted use of the property is desired, consideration should be given to performing removal or remedial actions designed to reduce the concentrations of toxaphene in soil to levels that are suitable for residential use. Alternatively, a land use covenant agreement, limiting the future use of the site for non-residential purposes, would be an appropriate risk management option. In general, the vertical extent of toxaphene in soil appears to be limited to the first few feet below ground surface. The limited vertical extent of toxaphene is consistent with the historical application of this now banned pesticide. While the concentrations of toxaphene and other OCPs detected in soil are not anticipated to result in adverse impacts to future site workers, students, or construction workers, ATC recommends that a Soil Management Plan be prepared prior to initiating site development activities. The Soil Management Plan would outline procedures for dust mitigation during earth moving and soil disturbing activities, identify specific health and safety considerations, and establish procedures for monitoring, sampling, and disposal or import of soil utilized during construction.

ATC also suggests that consideration be given to the design and planning of the proposed school site in order to further minimize the potential for direct-contact with OCP impacted soil. Representative measures may include, but are not necessarily limited to, import of clean, documented fill material for use in planters, playgrounds, and playing fields within the first foot of ground surface, and removing topsoil from planned playfield areas for use beneath asphalt-covered areas. These additional measures would serve to further reduce and/or eliminate exposures to residual OCPs in soil.

9.0 PUBLIC PARTICIPATION PROCESS

The OSD has elected to make this PEA available for public review and comment, concurrently with DTSC review, as allowed in California Education Code § 17213.1, (a)(6)(A).

The OSD published a notice of the availability of the PEA for public review in a local newspaper. The OSD initiated the public comment period on March 23rd, 2017, which will continue through April 24th 2017. Additionally, the OSD will hold a public hearing on April 19th to discuss the PEA. All public comments pertaining to the PEA will be forwarded to the DTSC once received.

10.0 LIMITATIONS

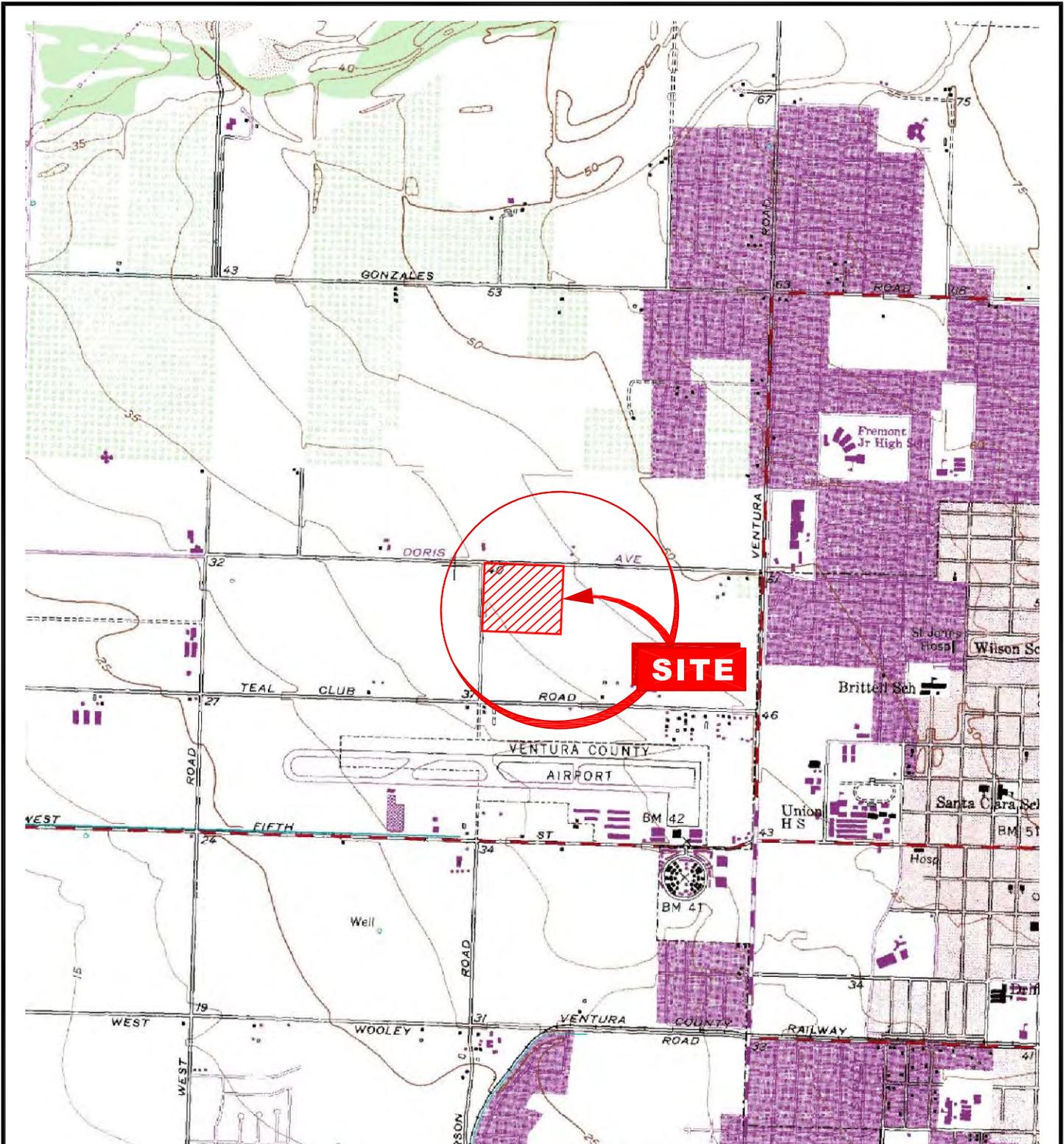
The conclusions presented in this document are based on ATC's observations of existing site conditions, interpretation of site history, site usage information collected during the study, and the professional judgment of ATC. Conclusions should not be relied upon to precisely represent conditions at any other time. Facts, conditions, and acceptable risk factors may change with time and this report should be utilized within this context. Findings based on the usage of data provided by others carry no warranty, expressed or implied. Conclusions about the site conditions under no circumstances comprise a warranty that conditions in all areas within the site (and beneath structures) are of the same quality that ATC has inferred from observable site conditions and readily available site history. ATC makes no warranty, either expressed or implied, as to its findings, opinions, recommendations, specifications, or professional advice, except that they were formulated after being prepared in accordance with generally accepted standards of care and diligence normally practiced by recognized consulting firms performing services of similar nature.

11.0 REFERENCES

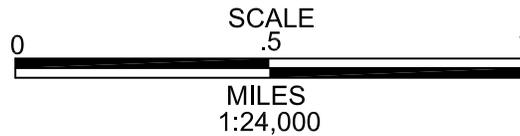
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FIGURES



OXNARD, CALIFORNIA QUADRANGLE (PROVISIONAL EDITION 1967)



SITE VICINITY MAP
PROPOSED NEW SCHOOL SITE
 DORIS AVENUE AND NORTH PATTERSON ROAD
 OXNARD, CALIFORNIA

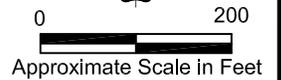
PROJECT NUMBER: 1011600826	PHASE: 1	FIGURE
REVIEW BY: G. BUCHANAN	DRAWN BY: DAW	1
ATC 25 Cupania Circle Monterey Park, CA 91755		
Ph: (323) 517-9780 ***		Fax: (323) 517-9781

FILE: _____



LEGEND

- SB-1 ● SOIL BORING LOCATION
- SV-1 ○ VAPOR BORING LOCATION



SCALE: 1" = 200'

**SITE PLAN WITH BORING LOCATIONS
PROPOSED NEW SCHOOL SITE
DORIS AVENUE AND NORTH PATTERSON ROAD
OXNARD, CALIFORNIA**

PROJECT NUMBER: 1011600826	PHASE: 1	FIGURE
REVIEW BY: G. BUCHANAN	DRAWN BY: DAW	2
25 Cupania Circle Monterey Park, CA 91755 Ph: (323) 517-9780 *** Fax: (323) 517-9781		

FILE: _____

TABLES

Table 1
Laboratory Summary - Soil Analytical Data: OCPs & Arsenic

Proposed Elementary and Middle Schools
Southeast Corner of Doris Avenue and Patterson Road
Oxnard, California

Sample ID	Sample Location(s)	Sample Depth (feet)	Date Sampled	alpha-Chlordane (ug/kg)	gamma-Chlordane (ug/kg)	4,4'-DDD (ug/kg)	4,4'-DDE (ug/kg)	4,4'-DDT (ug/kg)	Dieldrin (ug/kg)	Endrin (ug/kg)	Methoxychlor (ug/kg)	Toxaphene (ug/kg)	Arsenic (ug/kg)
Regional Screening Levels: Residential Land Use (TR of 1x10⁻⁶ and THQ of 1.0) - May 2016													
				1,700	1,700	2,300	2,000	1,900	34	19,000	320,000	490	0.68*
DTSC Screening Levels: Residential Land Use (lowest-listed concentration shown)													
				430	430	--	--	--	--	--	--	--	0.067
COMP 1	SB-1, SB-2 SB-3, SB-4	0.5	12/13/2016	ND<8.0	8.54	32.2	549	276	21.3	58.0	ND<40	2,200	NA
		2	12/13/2016	ND<8.0	ND<8.0	26.3	245	102.0	18.5	41.3	ND<40	1,110	NA
COMP 2	SB-5, SB-6 SB-7, SB-8	0.5	12/13/2016	ND<8.0	8.94	32.6	597	268	24.2	60.1	ND<40	2,140	NA
		2	12/13/2016	ND<8.0	ND<8.0	17.9	240	98.1	21	33.1	ND<40	926	NA
COMP 3	SB-9, SB-10 SB-11, SB-12	0.5	12/13/2016	8.10	8.21	29.4	485	261	21.1	54.8	ND<40	2,250	NA
		2	12/13/2016	ND<8.0	ND<8.0	ND<8.0	117	36.9	8.95	13.8	ND<40	519	NA
COMP 4	SB-13, SB-14, SB-15, SB-16	0.5	12/13/2016	ND<8.0	9.71	33.4	592	261	22.2	61.4	ND<40	2,080	NA
		2	12/13/2016	ND<8.0	ND<8.0	12	147	52.1	10	19.1	ND<40	395	NA
COMP 5	SB-17, SB-18 SB-19, SB-20	0.5	12/13/2016	ND<8.0	9.41	38.4	579	273	18.5	60.9	ND<40	2,110	NA
		2	12/13/2016	ND<8.0	ND<8.0	27.4	233	105	17.2	41.8	ND<40	731	NA
COMP 6	SB-21, SB-22, SB-23, SB-24	0.5	12/13/2016	ND<8.0	9.35	33.2	522	277	17.3	62.2	ND<40	2,180	NA
		0.5 (DUP)	12/13/2016	ND<8.0	9.07	31.0	551	258	14.0	57.5	ND<40	2,060	NA
		2	12/13/2016	ND<8.0	ND<8.0	ND<8.0	60.1	20.4	ND<8.0	8.96	ND<40	218	NA
COMP 7	SB-25, SB-26, SB-27, SB-28	0.5	12/13/2016	9.01	10.7	40.1	618	311	17.8	71.4	ND<40	2,380	NA
		2	12/13/2016	ND<8.0	ND<8.0	ND<8.0	81.3	23.7	ND<8.0	11.3	231	ND<120	NA
COMP 8	SB-29, SB-30, SB-31, SB-32	0.5	12/13/2016	8.46	11.5	39.6	589	343	16.7	79.0	ND<40	2,500	NA
		2	12/13/2016	ND<8.0	ND<8.0	ND<8.0	69.7	21.4	ND<8.0	10.5	ND<40	252	NA
COMP 9	SB-33, SB-34, SB-35, SB-36	0.5	12/13/2016	8.22	10.9	46.1	646	358	17.1	85.8	ND<40	2,510	NA
		2	12/13/2016	ND<8.0	ND<8.0	ND<8.0	81.5	25.1	ND<8.0	12.2	ND<40	226	NA
SB-3 @0.5'	SB-3	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.28
SB-6 @0.5'	SB-6	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.23
SB-11 @0.5'	SB-11	0.0	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.26
SB-14 @0.5'	SB-14	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.20
SB-14 @0.5' DUP	SB-14	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.01
SB-20 @0.5'	SB-20	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.34
SB-24 @0.5'	SB-24	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.61
SB-26 @0.5'	SB-26	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.60
SB-32 @0.5'	SB-32	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.40
SB-33 @0.5'	SB-33	0.5	12/13/2016	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.76

Explanations:

-- = No established value

DTSC Screening levels referenced from Human Health Risk Assessment Note 3 (March 2016), Table 1.

* = The Regional Screening Level for arsenic is 0.68 mg/kg; the consensus background for arsenic in the Southern California region is 12 mg/kg.

OCP = Organochlorine pesticide

ug/kg = Micrograms per kilogram

TR = Target cancer risk

THQ = Total hazard quotient

< = Not detected at concentration exceeding stated laboratory reporting limit

OCP analysis by EPA Method 8081A

Table 2
Laboratory Summary - Soil Vapor Data
Proposed Elementary and Middle Schools
Southeast Corner of Doris Avenue and Patterson Road
Oxnard, California

Sample Location	Sample Depth (feet)	Date Sampled	Methane (ppmv)	Hydrogen Sulfide (ppmv)
Regional Screening Levels: Residential Land Use (TR of 1x10-6 and THQ of 1.0) - May 2016				
DTSC Screening Levels: Residential Land Use				
			--	--
SV-1	5.0	12/14/2016	<10	<1.0
	10	12/14/2016	<10	<1.0
SV-2	5.0	12/14/2016	14.09	<1.0
	10	12/14/2016	<10	<1.0
SV-3	5.0	12/14/2016	15.26	<1.0
	10	12/14/2016	<10	<1.0
SV-4	5.0	12/14/2016	<10	<1.0
	10	12/14/2016	15.22	<1.0
SV-5	5	12/14/2016	10.28	<1.0
	10	12/14/2016	<10	<1.0
SV-6	5	12/14/2016	<10	<1.0
	10	12/14/2016	<10	<1.0
	DUP	12/14/2016	<10	<1.0
SV-7	5	12/14/2016	<10	<1.0
	10	12/14/2016	<10	<1.0
SV-8	5	12/14/2016	<10	<1.0
	10	12/14/2016	<10	<1.0
SV-9	5	12/14/2016	13.51	<1.0
	10	12/14/2016	<10	<1.0
SV-10	5	12/14/2016	<10	<1.0
	10	12/14/2016	<10	<1.0

Explanations:

ppmv = parts per million by volume

DTSC Screening levels referenced from Human Health Risk Assessment Note 3 (March 2016), Table 1.

< = Not detected at concentration exceeding stated laboratory reporting limit

Table 3
Laboratory Summary - Equipment Blank Samples

Proposed Elementary and Middle Schools
 Southeast Corner of Doris Avenue and Patterson Road
 Oxnard, California

Sample ID	Sample Location(s)	Date Sampled	Arsenic (ug/L)	Oranochlorine Pesticides (ug/L)	Oranophosphorus Pesticides (ug/L)	Title 22 Metals (ug/L)	Volatile Organic Compounds (ug/L)
EB-1	COMP 6	12/13/2016	ND	ND	ND	ND	ND

Explanations:

ug/L = Micrograms per liter

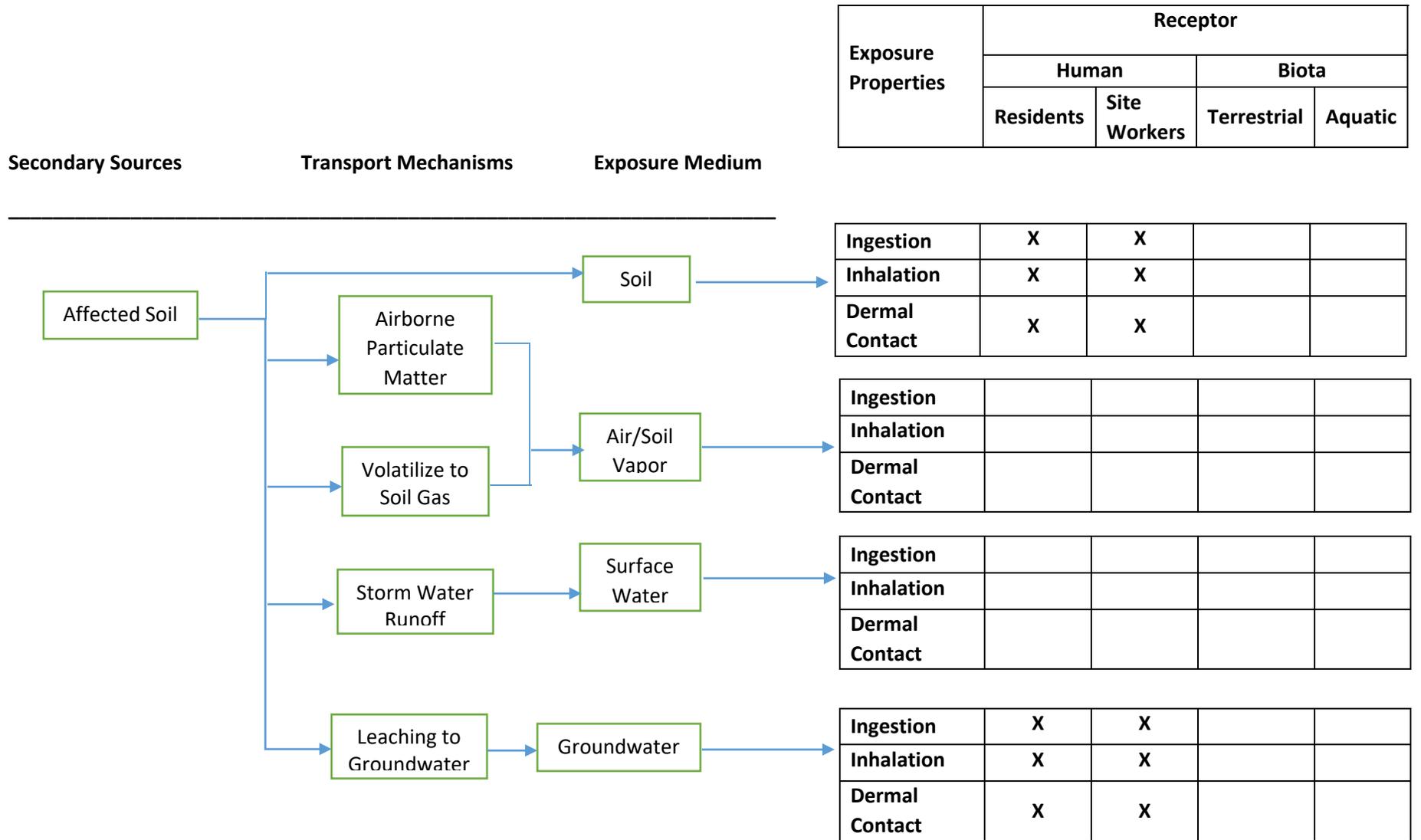
ND = Not detected at concentrations exceeding laboratory reporting limits.

Arsenic analysis by EPA Method 6010B

Organochlorine pesticide analysis by EPA Method 8081A

APPENDIX A
SITE CONCEPTUAL MODEL

SITE CONCEPTUAL MODEL PATHWAY RECEPTOR NETWORK
 PROPOSED SCHOOL SITE – DORIS AVENUE AND PATTERSON ROAD, OXNARD



APPENDIX B

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

December 21, 2016

Mr. Greg Buchanan
ATC Group Services LLC [Monterey Park]
25 Cupania Circle
Monterey Park, CA 91755

Report No.: 1612108
Project Name: Oxnard School District - 1011600538

Dear Mr. Greg Buchanan,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on December 14, 2016.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.


Project Manager



781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

Certificate of Analysis

ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 1 @ 0.5' Soil (1612108-01) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	8.54		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	32.2		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	549		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	276		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	21.3		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	58.0		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2200		1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
<hr/>											
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	84.8 %			55-126		EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	102 %			49-133		EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 2 @ 0.5' Soil (1612108-02) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	8.94		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	32.6		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	597		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	268		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	24.2		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	60.1		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939



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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 2 @ 0.5' Soil (1612108-02) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Toxaphene	2140		1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: 2,4,5,6 Tetrachloro-m-xylol	83.4 %				55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	104 %				49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 3 @ 0.5' Soil (1612108-03) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	8.10		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	8.21		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	29.4		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	485		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	261		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	21.1		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	54.8		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2250		1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: 2,4,5,6 Tetrachloro-m-xylol	91.4 %				55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	104 %				49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 4 @ 0.5' Soil (1612108-04) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	9.71		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	33.4		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	592		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	261		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	22.2		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	61.4		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939



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Certificate of Analysis

ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 4 @ 0.5' Soil (1612108-04) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2080		1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylene 75.4 %</i>											
					55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
<i>Surrogate: Decachlorobiphenyl 101 %</i>											
					49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Sample ID: COMP 5 @ 0.5' Soil (1612108-05) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	9.41		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	38.4		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	579		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	273		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	18.5		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	60.9		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2110		1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylene 82.5 %</i>											
					55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
<i>Surrogate: Decachlorobiphenyl 114 %</i>											
					49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Sample ID: COMP 6 @ 0.5' Soil (1612108-06) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	9.35		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	33.2		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	522		5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	277		1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	17.3		1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939



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Certificate of Analysis

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File #:73399
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PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 6 @ 0.5' Soil (1612108-06) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
Endosulfan I	ND	1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	62.2	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND	1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2180	1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Surrogate: 2,4,5,6 Tetrachloro-m-xylol	86.0 %			55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	111 %			49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 6 @ 0.5' DUP Soil (1612108-07) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	9.07		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	31.0		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	551		5	ug/kg	80.0	EPA 3546 EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	258		1	ug/kg	16.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	14.0		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	57.5		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2060		1	ug/kg	120	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939

Surrogate: 2,4,5,6 Tetrachloro-m-xylol	79.9 %			55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	106 %			49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 7 @ 0.5' Soil (1612108-08) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	9.01		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939



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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 7 @ 0.5' Soil (1612108-08) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
gamma-Chlordane	10.7	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	40.1	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	618	5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	311	1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	17.8	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND	1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	71.4	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND	1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2380	1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Surrogate: 2,4,5,6 Tetrachloro-m-xylene	85.0 %			55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	111 %			49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 8 @ 0.5' Soil (1612108-09) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	8.46		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	11.5		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	39.6		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	589		5	ug/kg	80.0	EPA 3546 EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	343		1	ug/kg	16.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	16.7		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND		1	ug/kg	16.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	79.0		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND		1	ug/kg	40.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND		1	ug/kg	24.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND		1	ug/kg	40.0	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2500		1	ug/kg	120	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939

Surrogate: 2,4,5,6 Tetrachloro-m-xylene	79.6 %			55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	119 %			49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: COMP 9 @ 0.5' Soil (1612108-10) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/kg	8.00	EPA 3546 EPA 8081A	12/16/16	12/19/16	ai	BL61939



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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 9 @ 0.5' Soil (1612108-10) Sampled:12/13/16 00:00 Received:12/14/16 14:40										
alpha-BHC	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
beta-BHC	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
delta-BHC	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-BHC (Lindane)	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
alpha-Chlordane	8.22	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
gamma-Chlordane	10.9	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDD	46.1	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
4,4'-DDE	646	5	ug/kg	80.0	EPA 3546	EPA 8081A	12/16/16	12/20/16	ai	BL61939
4,4'-DDT	358	1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Dieldrin	17.1	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan I	ND	1	ug/kg	16.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan II	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endosulfan sulfate	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin	85.8	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Technical Chlordane	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin aldehyde	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Endrin ketone	ND	1	ug/kg	24.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Heptachlor epoxide	ND	1	ug/kg	8.00	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Methoxychlor	ND	1	ug/kg	40.0	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Toxaphene	2510	1	ug/kg	120	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	84.4 %			55-126	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939
Surrogate: Decachlorobiphenyl	111 %			49-133	EPA 3546	EPA 8081A	12/16/16	12/19/16	ai	BL61939

Sample ID: SB-3 @ 0.5' Soil (1612108-11) Sampled:12/13/16 08:48 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.28		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-6 @ 0.5' Soil (1612108-12) Sampled:12/13/16 07:56 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.23		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-11 @ 0.5' Soil (1612108-13) Sampled:12/13/16 09:16 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.26		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-14 @ 0.5' Soil (1612108-14) Sampled:12/13/16 10:03 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.20		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-14 @ 0.5' DUP Soil (1612108-15) Sampled:12/13/16 10:03 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.01		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-20 @ 0.5' Soil (1612108-16) Sampled:12/13/16 11:10 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.34		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923

Sample ID: SB-24 @ 0.5' Soil (1612108-17) Sampled:12/13/16 10:59 Received:12/14/16 14:40										
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Arsenic	3.61		1	mg/kg	2.00	EPA 3050B EPA 6010B	12/15/16	12/16/16	CG	BL61923



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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: SB-26 @ 0.5' Soil (1612108-18) Sampled:12/13/16 13:18 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Arsenic	3.60		1	mg/kg	2.00	EPA 3050B	EPA 6010B	12/15/16	12/16/16	CG	BL61923
Sample ID: SB-32 @ 0.5' Soil (1612108-19) Sampled:12/13/16 13:50 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Arsenic	3.40		1	mg/kg	2.00	EPA 3050B	EPA 6010B	12/15/16	12/16/16	CG	BL61923
Sample ID: SB-33 @ 0.5' Soil (1612108-20) Sampled:12/13/16 13:01 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Arsenic	3.76		1	mg/kg	2.00	EPA 3050B	EPA 6010B	12/15/16	12/16/16	CG	BL61923
Sample ID: EQ Blank 1 Water (1612108-21) Sampled:12/13/16 14:20 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND		1	ug/l	0.0100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
alpha-BHC	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
beta-BHC	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
delta-BHC	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
gamma-BHC (Lindane)	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
alpha-Chlordane	ND		1	ug/l	0.0500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
gamma-Chlordane	ND		1	ug/l	0.0500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
4,4'-DDD	ND		1	ug/l	0.0500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
4,4'-DDE	ND		1	ug/l	0.0500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
4,4'-DDT	ND		1	ug/l	0.0100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Dieldrin	ND		1	ug/l	0.0100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endosulfan I	ND		1	ug/l	0.100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endosulfan II	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endosulfan sulfate	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endrin	ND		1	ug/l	0.0100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endrin aldehyde	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Endrin ketone	ND		1	ug/l	0.100	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Heptachlor	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Heptachlor epoxide	ND		1	ug/l	0.0200	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Methoxychlor	ND		1	ug/l	0.500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Technical Chlordane	ND		1	ug/l	0.500	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Toxaphene	ND		1	ug/l	1.00	EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
<hr/>											
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	54.0 %			36-114		EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Surrogate: Decachlorobiphenyl	66.7 %			33-129		EPA 3535A	EPA 8081A	12/16/16	12/21/16	ai	BL62150
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Arsenic	ND		1	mg/L	0.0200	EPA 200.7	EPA 6010B	12/16/16	12/19/16	CG	BL61943



781 East Washington Blvd., Los Angeles, CA 90021
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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BL61939 - EPA 3546										
Blank Prepared: 12/16/16 Analyzed: 12/19/16										
Aldrin	ND	2.00	ug/kg							
alpha-BHC	ND	2.00	ug/kg							
beta-BHC	ND	2.00	ug/kg							
delta-BHC	ND	2.00	ug/kg							
gamma-BHC (Lindane)	ND	2.00	ug/kg							
alpha-Chlordane	ND	2.00	ug/kg							
gamma-Chlordane	ND	2.00	ug/kg							
4,4'-DDD	ND	2.00	ug/kg							
4,4'-DDE	ND	4.00	ug/kg							
4,4'-DDT	ND	4.00	ug/kg							
Dieldrin	ND	2.00	ug/kg							
Endosulfan I	ND	4.00	ug/kg							
Endosulfan II	ND	2.00	ug/kg							
Endosulfan sulfate	ND	2.00	ug/kg							
Endrin	ND	2.00	ug/kg							
Technical Chlordane	ND	10.0	ug/kg							
Endrin aldehyde	ND	2.00	ug/kg							
Endrin ketone	ND	6.00	ug/kg							
Heptachlor	ND	2.00	ug/kg							
Heptachlor epoxide	ND	2.00	ug/kg							
Methoxychlor	ND	10.0	ug/kg							
Toxaphene	ND	30.0	ug/kg							
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	5.84		ug/kg	10.00		58.4	55-126			
Surrogate: Decachlorobiphenyl	8.66		ug/kg	10.00		86.6	49-133			
LCS Prepared: 12/16/16 Analyzed: 12/19/16										
Aldrin	10.6	2.00	ug/kg	13.33		79.6	56-130			
gamma-BHC (Lindane)	10.2	2.00	ug/kg	13.33		76.6	56-133			
4,4'-DDT	10.1	4.00	ug/kg	13.33		76.0	56-133			
Dieldrin	11.5	2.00	ug/kg	13.33		86.5	62-119			
Endrin	11.5	2.00	ug/kg	13.33		86.6	59-127			
Heptachlor	11.2	2.00	ug/kg	13.33		84.1	55-110			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	8.53		ug/kg	10.00		85.3	54-108			
Surrogate: Decachlorobiphenyl	7.96		ug/kg	10.00		79.6	54-127			
Matrix Spike Source: 1612108-10 Prepared: 12/16/16 Analyzed: 12/19/16										
Aldrin	11.3	2.00	ug/kg	13.33	ND	85.0	39-124			
gamma-BHC (Lindane)	12.0	2.00	ug/kg	13.33	ND	90.0	44-120			
4,4'-DDT	383	4.00	ug/kg	33.33	358	74.9	48-150			
Dieldrin	63.5	2.00	ug/kg	33.33	17.1	139	48-144			
Endrin	113	2.00	ug/kg	33.33	85.8	80.6	54-149			



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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BL61939 - EPA 3546										
Heptachlor	11.4	2.00	ug/kg	13.33	ND	85.4	46-135			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	8.94		ug/kg	10.00		89.4	57-126			
Surrogate: Decachlorobiphenyl	11.0		ug/kg	10.00		110	43-136			
Matrix Spike Dup Source: 1612108-10 Prepared: 12/16/16 Analyzed: 12/19/16										
Aldrin	10.8	2.00	ug/kg	13.33	ND	81.0	39-124	4.81	30	
gamma-BHC (Lindane)	10.7	2.00	ug/kg	13.33	ND	80.5	44-120	11.2	30	
4,4'-DDT	356	4.00	ug/kg	33.33	358	NR	48-150	NR	30	V-2
Dieldrin	55.5	2.00	ug/kg	33.33	17.1	115	48-144	18.8	30	
Endrin	96.9	2.00	ug/kg	33.33	85.8	33.6	54-149	82.3	30	V-2
Heptachlor	10.5	2.00	ug/kg	13.33	ND	78.5	46-135	8.36	30	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	8.41		ug/kg	10.00		84.1	57-126			
Surrogate: Decachlorobiphenyl	10.1		ug/kg	10.00		101	43-136			
Batch BL62150 - EPA 3535A										
Blank Prepared: 12/16/16 Analyzed: 12/21/16										
Aldrin	ND	0.0100	ug/l							
alpha-BHC	ND	0.0200	ug/l							
beta-BHC	ND	0.0200	ug/l							
delta-BHC	ND	0.0200	ug/l							
gamma-BHC (Lindane)	ND	0.0200	ug/l							
alpha-Chlordane	ND	0.0500	ug/l							
gamma-Chlordane	ND	0.0500	ug/l							
4,4'-DDD	ND	0.0500	ug/l							
4,4'-DDE	ND	0.0500	ug/l							
4,4'-DDT	ND	0.0100	ug/l							
Dieldrin	ND	0.0100	ug/l							
Endosulfan I	ND	0.100	ug/l							
Endosulfan II	ND	0.0200	ug/l							
Endosulfan sulfate	ND	0.0200	ug/l							
Endrin	ND	0.0100	ug/l							
Endrin aldehyde	ND	0.0200	ug/l							
Endrin ketone	ND	0.100	ug/l							
Heptachlor	ND	0.0200	ug/l							
Heptachlor epoxide	ND	0.0200	ug/l							
Methoxychlor	ND	0.500	ug/l							
Technical Chlordane	ND	0.500	ug/l							
Toxaphene	ND	1.00	ug/l							
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	0.137		ug/l	0.1500		91.3	36-114			
Surrogate: Decachlorobiphenyl	0.132		ug/l	0.1500		88.0	33-129			
LCS Prepared: 12/16/16 Analyzed: 12/21/16										



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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BL62150 - EPA 3535A										
Aldrin	0.150	0.0100	ug/l	0.2000		75.0	40-110			
gamma-BHC (Lindane)	0.154	0.0200	ug/l	0.2000		77.0	44-101			
4,4'-DDE	0.179	0.0500	ug/l	0.2000		89.5	43-116			
4,4'-DDT	0.174	0.0100	ug/l	0.2000		87.0	51-125			
Dieldrin	0.191	0.0100	ug/l	0.2000		95.5	54-111			
Endrin	0.199	0.0100	ug/l	0.2000		99.5	55-120			
Heptachlor	0.160	0.0200	ug/l	0.2000		80.0	45-109			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	0.112		ug/l	0.1500		74.7	39-114			
Surrogate: Decachlorobiphenyl	0.124		ug/l	0.1500		82.7	36-118			
LCS Dup Prepared: 12/16/16 Analyzed: 12/21/16										
Aldrin	0.148	0.0100	ug/l	0.2000		74.0	40-110	1.34	25	
gamma-BHC (Lindane)	0.140	0.0200	ug/l	0.2000		70.0	44-101	9.52	25	
4,4'-DDE	0.174	0.0500	ug/l	0.2000		87.0	43-116	2.83	25	
4,4'-DDT	0.165	0.0100	ug/l	0.2000		82.5	51-125	5.31	25	
Dieldrin	0.183	0.0100	ug/l	0.2000		91.5	54-111	4.28	25	
Endrin	0.188	0.0100	ug/l	0.2000		94.0	55-120	5.68	25	
Heptachlor	0.152	0.0200	ug/l	0.2000		76.0	45-109	5.13	25	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	0.109		ug/l	0.1500		72.7	39-114			
Surrogate: Decachlorobiphenyl	0.132		ug/l	0.1500		88.0	36-118			
Batch BL61923 - EPA 3050B										
Blank Prepared: 12/15/16 Analyzed: 12/16/16										
Arsenic	ND	2.00	mg/kg							
LCS Prepared: 12/15/16 Analyzed: 12/16/16										
Arsenic	46.0	2.00	mg/kg	49.57		92.7	80-120			
Matrix Spike Source: 1612108-11 Prepared: 12/15/16 Analyzed: 12/16/16										
Arsenic	47.7	2.00	mg/kg	49.57	3.28	89.7	75-125			
Matrix Spike Dup Source: 1612108-11 Prepared: 12/15/16 Analyzed: 12/16/16										
Arsenic	48.4	2.00	mg/kg	49.57	3.28	90.9	75-125	1.36	30	
Batch BL61943 - EPA 200.7										
Blank Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	ND	0.0200	mg/L							
LCS Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	0.487	0.0200	mg/L	0.4974		97.9	85-115			
LCS Dup Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	0.502	0.0200	mg/L	0.4974		101	85-115	2.98	20	
Duplicate Source: 1612116-01 Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	ND	0.0200	mg/L		ND				20	



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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 12/21/16
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BL61943 - EPA 200.7										
Matrix Spike Source: 1612116-01 Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	0.497	0.0200	mg/L	0.4974	ND	100	80-120			
Matrix Spike Dup Source: 1612116-01 Prepared: 12/16/16 Analyzed: 12/19/16										
Arsenic	0.482	0.0200	mg/L	0.4974	ND	96.9	80-120	3.08	20	

Notes and Definitions

- V-2 Out-of-Range recovery was due to sample Heterogeneity.
- NA Not Applicable
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- MDL Method Detection Limit
- PQL Practical Quantitation Limit

Authorized Signature(s)



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 1 OF 10
 FILE NO.: _____ LAB NO.: 1012108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600538 P.O.NO. _____ AIRBILL NO: _____

ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED _____ COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 REMARKS: _____

SAMPLER NAME: _____ SIGNATURE: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A									SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE											
	<u>12/13/16</u>		Comp 1 @ 0.5'		X			N		G		X									LAB TO COMPOSITE
			Comp 1 @ 2'		X			N		G		X									LAB TO COMPOSITE HOLD
		<u>739</u>	SB-1 @ 0.5'		X			N	1	G											HOLD
		<u>741</u>	SB-1 @ 2'		X			N	1	G											HOLD
		<u>744</u>	SB-2 @ 0.5'		X			N	1	G											HOLD
		<u>816</u>	SB-2 @ 2'		X			N	1	G											HOLD
		<u>848</u>	SB-3 @ 0.5'		X			N	2	G	X										HOLD
		<u>857</u>	SB-3 @ 2'		X			N	1	G											HOLD
		<u>855</u>	SB-4 @ 0.5'		X			N	1	G											HOLD
		<u>857</u>	SB-4 @ 2'		X			N	1	G											HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: _____	Time: _____	

SPECIAL INSTRUCTION: _____

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: _____ PAGE: 1 OF 1
 FILE NO.: _____ LAB NO.: 1012108

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600538** P.O.NO. _____ AIRBILL NO: _____
 ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED _____ COOLER TEMP: 1.3°C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** <---PRESERVATION * _____

SAMPLER NAME: _____ SIGNATURE: _____ REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 2 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 2 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
		<u>748</u>	SB-5 @ 0.5'		X			N	1	G									
		<u>751</u>	SB-5 @ 2'		X			N	1	G									HOLD
		<u>750</u>	SB-6 @ 0.5'		X			N	2	G	X								
		<u>800</u>	SB-6 @ 2'		X			N	1	G									HOLD
		<u>903</u>	SB-7 @ 0.5'		X			N	1	G									
		<u>905</u>	SB-7 @ 2'		X			N	1	G									HOLD
		<u>910</u>	SB-8 @ 0.5'		X			N	1	G									
		<u>912</u>	SB-8 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days. By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION: _____

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 2/14/16
 FILE NO.:

PAGE: 3 OF 10
 LAB NO.: 1012108

CLIENT NAME: Oxnard School District			PROJECT NAME/NO. 1011600537				P.O.NO.				AIRBILL NO:		
ADDRESS: 25 Cupania Circle, Monterey Park			PROJECT MANAGER: Greg Buchanan				PHONE NO: 323-517-9780 FAX NO: 323.517.9781				ANALYSES REQUESTED		
SAMPLER NAME:			SIGNATURE:				Arsenic by EPA 6010B		OCPrs by EPA 8081A		REMARKS: <u>←←-PRESERVATION *</u>		
TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal			CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other										
UST PROJECT: Y N GLOBAL ID#: -----			SAMPLE ID		DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION				SAMPLE CONDITIONS/CONTAINER/COMMENTS		
						MATRIX				TAT	CONTAINER		
						WATER	SOIL	SLUDGE	OTHER		#	TYPE	
							X			N	G	X	
							X			N	G	X	
			<u>807</u>				X			N	1	G	
			<u>808</u>				X			N	1	G	
			<u>815</u>				X			N	1	G	
			<u>817</u>				X			N	1	G	
			<u>910</u>				X			N	2	G	
			<u>916</u>				X			N	1	G	
			<u>922</u>				X			N	1	G	
			<u>924</u>				X			N	1	G	

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:16</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 4 OF 10
 FILE NO.: LAB NO.: 1012108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:

ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 REMARKS: _____

SAMPLER NAME: SIGNATURE: Arsenic by EPA 6010B OCPs by EPA 8081A

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 4 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 4 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
		<u>958</u>	SB-13 @ 0.5'		X			N	1	G									
		<u>1001</u>	SB-13 @ 2'		X			N	1	G									HOLD
		<u>1003</u>	SB-14 @ 0.5'		X			N	2	G	X								
		<u>1003</u>	SB-14 @ 0.5' DUP		X			N	1	G	X								
		<u>1006</u>	SB-14 @ 2'		X			N	1	G									HOLD
		<u>1127</u>	SB-15 @ 0.5'		X			N	1	G									
		<u>1129</u>	SB-15 @ 2'		X			N	1	G									HOLD
		<u>1122</u>	SB-16 @ 0.5'		X			N	1	G									
		<u>1124</u>	SB-16 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days. By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/14 PAGE: 5 OF 10
 FILE NO.: _____ LAB NO.: 1012/08

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600537** P.O.NO. _____ AIRBILL NO: _____

ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED _____ COOLER TEMP: 1.3°C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** <---PRESERVATION * _____

SAMPLER NAME: _____ SIGNATURE: _____ REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/14</u>		Comp 5 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 5 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
		<u>1010</u>	SB-17 @ 0.5'		X			N	1	G									
		<u>1012</u>	SB-17 @ 2'		X			N	1	G									HOLD
		<u>1015</u>	SB-18 @ 0.5'		X			N	1	G									
		<u>1017</u>	SB-18 @ 2'		X			N	1	G									HOLD
		<u>1116</u>	SB-19 @ 0.5'		X			N	1	G									
		<u>1118</u>	SB-19 @ 2'		X			N	1	G									HOLD
		<u>1110</u>	SB-20 @ 0.5'		X			N	2	G	X								
		<u>1113</u>	SB-20 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION: _____

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/14/16 PAGE: 1 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:

ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.6°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 REMARKS: _____

SAMPLER NAME: SIGNATURE: Arsenic by EPA 6010B OCPs by EPA 8081A

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 6 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 6 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
			Comp 6 @ 0.5' DUP		X			N	1	G		X							LAB TO COMPOSITE
		<u>1020</u>	SB-21 @ 0.5'		X			N	2	G									
		<u>1022</u>	SB-21 @ 2'		X			N	1	G									HOLD
		<u>1027</u>	SB-22 @ 0.5'		X			N	2	G									
		<u>1029</u>	SB-22 @ 2'		X			N	1	G									HOLD
		<u>1104</u>	SB-23 @ 0.5'		X			N	2	G									
		<u>1106</u>	SB-23 @ 2'		X			N	1	G									HOLD
		<u>1059</u>	SB-24 @ 0.5'		X			N	3	G	X								
		<u>1101</u>	SB-24 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days. By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/15/16 PAGE: 7 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600538** P.O.NO. AIRBILL NO:
 ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED COOLER TEMP: 1.6°C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other
 UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/14/16</u>		Comp 7 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 7 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
		<u>1523</u>	SB-25 @ 0.5'		X			N	1	G									
		<u>1325</u>	SB-25 @ 2'		X			N	1	G									HOLD
		<u>1318</u>	SB-26 @ 0.5'		X			N	2	G	X								
		<u>1320</u>	SB-26 @ 2'		X			N	1	G									HOLD
		<u>1336</u>	SB-27 @ 0.5'		X			N	1	G									
		<u>1338</u>	SB-27 @ 2'		X			N	1	G									HOLD
		<u>1341</u>	SB-28 @ 0.5'		X			N	1	G									
		<u>1343</u>	SB-28 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): <u>Wipe Evidence</u>	Date: <u>12/14/16</u>	Time: <u>310</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 8 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600538** P.O.NO. AIRBILL NO:
 ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED COOLER TEMP: 1.6 °C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	Lead by EPA 6010B	OCPS by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE										
	<u>12/13/16</u>		Comp 8 @ 0.5'		X			N		G			X							LAB TO COMPOSITE
			Comp 8 @ 2'		X			N		G			X							LAB TO COMPOSITE HOLD
		<u>1312</u>	SB-29 @ 0.5'		X			N	1	G										
		<u>1314</u>	SB-29 @ 2'		X			N	1	G										HOLD
		<u>1307</u>	SB-30 @ 0.5'		X			N	1	G										
		<u>1308</u>	SB-30 @ 2'		X			N	1	G										HOLD
		<u>1346</u>	SB-31 @ 0.5'		X			N	1	G										
		<u>1348</u>	SB-31 @ 2'		X			N	1	G										HOLD
		<u>1350</u>	SB-32 @ 0.5'		X			N	2	G	X									
	<u>1352</u>		SB-32 @ 2'		X			N	1	G										HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 9 OF 10
 FILE NO.: _____ LAB NO.: 1412108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600538 P.O.NO. _____ AIRBILL NO: _____
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED _____ COOLER TEMP: 1.4°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 SAMPLER NAME: _____ SIGNATURE: _____ REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 9 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 9 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD
		<u>1301</u>	SB-33 @ 0.5'		X			N	2	G	X								
		<u>1303</u>	SB-33 @ 2'		X			N	1	G									HOLD
		<u>1257</u>	SB-34 @ 0.5'		X			N	1	G									
		<u>1259</u>	SB-34 @ 2'		X			N	1	G									HOLD
		<u>1355</u>	SB-35 @ 0.5'		X			N	1	G									
		<u>1357</u>	SB-35 @ 2'		X			N	1	G									HOLD
		<u>1402</u>	SB-36 @ 0.5'		X			N	1	G									
		<u>1404</u>	SB-36 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/12/16 PAGE: 10 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.4°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS:

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCs by EPA 8081A								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE										
	<u>12/13/16</u>	<u>1420</u>	EQ Blank 1	X				N		G	X	X								
			Temp blank	X				N		G										

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:46</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days. By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:16</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



781 East Washington Blvd., Los Angeles, CA 90021
{213} 745-5312 FAX {213} 745-6372

January 11, 2017

Mr. Greg Buchanan
ATC Group Services LLC [Monterey Park]
25 Cupania Circle
Monterey Park, CA 91755

Report No.: 1612108
Project Name: Oxnard School District - 1011600538

Dear Mr. Greg Buchanan,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on December 14, 2016.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.


Project Manager



781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

Certificate of Analysis

Page 2 of 8

ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID: COMP 1 @ 2' Soil (1612108-22) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	26.3	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	245	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	102	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	18.5	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	41.3	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	1110	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylol.</i>	<i>146 %</i>	<i>R4</i>		<i>55-126</i>		<i>EPA 3546</i>	<i>EPA 8081A</i>	<i>01/05/17</i>	<i>01/06/17</i>	<i>ai</i>	<i>BA71026</i>
<i>Surrogate: Decachlorobiphenyl</i>	<i>142 %</i>	<i>R4</i>		<i>49-133</i>		<i>EPA 3546</i>	<i>EPA 8081A</i>	<i>01/05/17</i>	<i>01/06/17</i>	<i>ai</i>	<i>BA71026</i>
Sample ID: COMP 2 @ 2' Soil (1612108-23) Sampled:12/13/16 00:00 Received:12/14/16 14:40											
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	17.9	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	240	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	98.1	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	21.0	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	33.1	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026



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Certificate of Analysis

ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID:	COMP 2 @ 2' Soil	(1612108-23)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Toxaphene	926	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	125 %	R4		55-126		EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Surrogate: Decachlorobiphenyl	135 %	R4		49-133		EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026

Sample ID:	COMP 3 @ 2' Soil	(1612108-24)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDD	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDE	117	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDT	36.9	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Dieldrin	8.95	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin	13.8	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Toxaphene	519	R4	1	ug/kg	120	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	133 %	R4		55-126		EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Surrogate: Decachlorobiphenyl	144 %	R4		49-133		EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	

Sample ID:	COMP 4 @ 2' Soil	(1612108-25)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDD	12.0	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDE	147	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDT	52.1	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Dieldrin	10.0	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin	19.1	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	



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Certificate of Analysis

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 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID:	COMP 4 @ 2' Soil	(1612108-25)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	395	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
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Surrogate: 2,4,5,6 Tetrachloro-m-xylar.	140 %	R4		ug/kg	55-126	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Surrogate: Decachlorobiphenyl	129 %	R4		ug/kg	49-133	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026

Sample ID:	COMP 5 @ 2' Soil	(1612108-26)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	27.4	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	233	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	105	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	17.2	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	41.8	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	731	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
<hr/>											
Surrogate: 2,4,5,6 Tetrachloro-m-xylar.	148 %	R4		ug/kg	55-126	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Surrogate: Decachlorobiphenyl	142 %	R4		ug/kg	49-133	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026

Sample ID:	COMP 6 @ 2' Soil	(1612108-27)	Sampled:	12/13/16 00:00	Received:	12/14/16 14:40					
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	60.1	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	20.4	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026



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Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID:	COMP 6 @ 2' Soil	(1612108-27)	Sampled:12/13/16 00:00	Received:12/14/16 14:40							
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	8.96	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	218	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
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Surrogate: 2,4,5,6 Tetrachloro-m-xylar.	149 %	R4			55-126	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Surrogate: Decachlorobiphenyl	143 %	R4			49-133	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026

Sample ID:	COMP 7 @ 2' Soil	(1612108-28)	Sampled:12/13/16 00:00	Received:12/14/16 14:40							
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDD	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDE	81.3	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
4,4'-DDT	23.7	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Dieldrin	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin	11.3	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Methoxychlor	231	R4	1	ug/kg	40.0	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Toxaphene	ND	R4	1	ug/kg	120	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
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Surrogate: 2,4,5,6 Tetrachloro-m-xylar.	141 %	R4			55-126	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
Surrogate: Decachlorobiphenyl	126 %	R4			49-133	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	

Sample ID:	COMP 8 @ 2' Soil	(1612108-29)	Sampled:12/13/16 00:00	Received:12/14/16 14:40							
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch	
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546 EPA 8081A	01/05/17	01/06/17	ai	BA71026	



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Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Sample ID:	COMP 8 @ 2' Soil	(1612108-29)	Sampled:12/13/16 00:00			Received:12/14/16 14:40					
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	69.7	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	21.4	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	10.5	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	252	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylol. 153 % R4 55-126 EPA 3546 EPA 8081A 01/05/17 01/06/17 ai BA71026</i>											
<i>Surrogate: Decachlorobiphenyl 146 % R4 49-133 EPA 3546 EPA 8081A 01/05/17 01/06/17 ai BA71026</i>											

Sample ID:	COMP 9 @ 2' Soil	(1612108-30)	Sampled:12/13/16 00:00			Received:12/14/16 14:40					
Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method		Prepared	Analyzed	By	Batch
Aldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
beta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
delta-BHC	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-BHC (Lindane)	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
alpha-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
gamma-Chlordane	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDD	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDE	81.5	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
4,4'-DDT	25.1	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Dieldrin	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan I	ND	R4	1	ug/kg	16.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan II	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endosulfan sulfate	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin	12.2	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Technical Chlordane	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin aldehyde	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Endrin ketone	ND	R4	1	ug/kg	24.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Heptachlor epoxide	ND	R4	1	ug/kg	8.00	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Methoxychlor	ND	R4	1	ug/kg	40.0	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
Toxaphene	226	R4	1	ug/kg	120	EPA 3546	EPA 8081A	01/05/17	01/06/17	ai	BA71026
<i>Surrogate: 2,4,5,6 Tetrachloro-m-xylol. 141 % R4 55-126 EPA 3546 EPA 8081A 01/05/17 01/06/17 ai BA71026</i>											
<i>Surrogate: Decachlorobiphenyl 130 % R4 49-133 EPA 3546 EPA 8081A 01/05/17 01/06/17 ai BA71026</i>											



781 East Washington Blvd., Los Angeles, CA 90021
 [213] 745-5312 FAX [213] 745-6372

Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BA71026 - EPA 3546										
Blank Prepared: 01/05/17 Analyzed: 01/06/17										
Aldrin	ND	2.00	ug/kg							
alpha-BHC	ND	2.00	ug/kg							
beta-BHC	ND	2.00	ug/kg							
delta-BHC	ND	2.00	ug/kg							
gamma-BHC (Lindane)	ND	2.00	ug/kg							
alpha-Chlordane	ND	2.00	ug/kg							
gamma-Chlordane	ND	2.00	ug/kg							
4,4'-DDD	ND	2.00	ug/kg							
4,4'-DDE	ND	4.00	ug/kg							
4,4'-DDT	ND	4.00	ug/kg							
Dieldrin	ND	2.00	ug/kg							
Endosulfan I	ND	4.00	ug/kg							
Endosulfan II	ND	2.00	ug/kg							
Endosulfan sulfate	ND	2.00	ug/kg							
Endrin	ND	2.00	ug/kg							
Technical Chlordane	ND	10.0	ug/kg							
Endrin aldehyde	ND	2.00	ug/kg							
Endrin ketone	ND	6.00	ug/kg							
Heptachlor	ND	2.00	ug/kg							
Heptachlor epoxide	ND	2.00	ug/kg							
Methoxychlor	ND	10.0	ug/kg							
Toxaphene	ND	30.0	ug/kg							
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	7.31		ug/kg	6.667		110	55-126			
Surrogate: Decachlorobiphenyl	7.81		ug/kg	6.667		117	49-133			
LCS Prepared: 01/05/17 Analyzed: 01/06/17										
Aldrin	12.2	2.00	ug/kg	13.33		91.3	56-130			
gamma-BHC (Lindane)	11.3	2.00	ug/kg	13.33		84.6	56-133			
4,4'-DDT	11.9	4.00	ug/kg	13.33		89.0	56-133			
Dieldrin	12.7	2.00	ug/kg	13.33		95.6	62-119			
Endrin	14.2	2.00	ug/kg	13.33		107	59-127			
Heptachlor	12.5	2.00	ug/kg	13.33		93.7	55-110			
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	6.88		ug/kg	6.667		103	54-108			
Surrogate: Decachlorobiphenyl	7.90		ug/kg	6.667		119	54-127			
Matrix Spike Source: 1612108-27 Prepared: 01/05/17 Analyzed: 01/06/17										
Aldrin	14.0	8.00	ug/kg	13.33	ND	105	39-124			R4
gamma-BHC (Lindane)	12.7	8.00	ug/kg	13.33	ND	95.2	44-120			R4
4,4'-DDT	46.8	16.0	ug/kg	33.33	20.4	79.1	48-150			R4
Dieldrin	40.5	8.00	ug/kg	33.33	3.93	110	48-144			R4
Endrin	44.1	8.00	ug/kg	33.33	8.96	106	54-149			R4



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 (213) 745-5312 FAX (213) 745-6372

Certificate of Analysis

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ATC Group Services LLC [Monterey Park]
 25 Cupania Circle
 Monterey Park, CA 91755

File #:73399
 Report Date: 01/11/17
 Submitted: 12/14/16
PLS Report No.: 1612108

Attn: Mr. Greg Buchanan Phone: (323) 517-9680 FAX:(323) 517-9781

Project: Oxnard School District - 1011600538

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BA71026 - EPA 3546										
Heptachlor	11.7	8.00	ug/kg	13.33	ND	87.9	46-135			R4
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	8.87		ug/kg	6.667		133	57-126			R4
Surrogate: Decachlorobiphenyl	7.26		ug/kg	6.667		109	43-136			R4
Matrix Spike Dup Source: 1612108-27 Prepared: 01/05/17 Analyzed: 01/06/17										
Aldrin	15.5	8.00	ug/kg	13.33	ND	116	39-124	9.68	30	R4
gamma-BHC (Lindane)	13.4	8.00	ug/kg	13.33	ND	101	44-120	5.65	30	R4
4,4'-DDT	50.6	16.0	ug/kg	33.33	20.4	90.6	48-150	13.5	30	R4
Dieldrin	41.9	8.00	ug/kg	33.33	3.93	114	48-144	3.56	30	R4
Endrin	46.6	8.00	ug/kg	33.33	8.96	113	54-149	6.76	30	R4
Heptachlor	12.7	8.00	ug/kg	13.33	ND	95.6	46-135	8.43	30	R4
Surrogate: 2,4,5,6 Tetrachloro-m-xylene	9.50		ug/kg	6.667		143	57-126			R4
Surrogate: Decachlorobiphenyl	9.10		ug/kg	6.667		137	43-136			R4

Notes and Definitions

- R4 Analysis requested past Holding Time.
- NA Not Applicable
- ND Analyte NOT DETECTED at or above the detection limit
- NR Not Reported
- MDL Method Detection Limit
- PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Authorized Signature(s)



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 1 OF 10
 FILE NO.: LAB NO.: 10/2108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600538 P.O.NO. _____ AIRBILL NO: _____
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED _____
 COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781
 ←-PRESERVATION *

SAMPLER NAME: _____ SIGNATURE: _____
 TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other
 REMARKS: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 1 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 1 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD <u>Diff HOLD 12/29 via email</u>
		<u>739</u>	SB-1 @ 0.5'		X			N	1	G									HOLD
		<u>741</u>	SB-1 @ 2'		X			N	1	G									HOLD
		<u>744</u>	SB-2 @ 0.5'		X			N	1	G									HOLD
		<u>846</u>	SB-2 @ 2'		X			N	1	G									HOLD
		<u>846</u>	SB-3 @ 0.5'		X			N	2	G	X								HOLD
		<u>851</u>	SB-3 @ 2'		X			N	1	G									HOLD
		<u>855</u>	SB-4 @ 0.5'		X			N	1	G									
		<u>857</u>	SB-4 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date:	Time:	

SPECIAL INSTRUCTION: _____
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: _____ PAGE: 1 OF 16
 FILE NO.: _____ LAB NO.: 1012108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600538 P.O.NO. AIRBILL NO:
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 ← PRESERVATION *

SAMPLER NAME: SIGNATURE: REMARKS:
 TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other
 UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	12/13/16		Comp 2 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 2 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD @ off field 12/15 via e-mail
		748	SB-5 @ 0.5'		X			N	1	G									
		751	SB-5 @ 2'		X			N	1	G									HOLD
		756	SB-6 @ 0.5'		X			N	2	G	X								
		860	SB-6 @ 2'		X			N	1	G									HOLD
		903	SB-7 @ 0.5'		X			N	1	G									
		905	SB-7 @ 2'		X			N	1	G									HOLD
		910	SB-8 @ 0.5'		X			N	1	G									
		912	SB-8 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: 12/14/16	Time: 2:40	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: 12/14/16	Time: 3:10	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
(213) 745-5312 FAX (213) 745-6372

DATE: 2/12/16 PAGE: 3 OF 10
FILE NO.: LAB NO.: 1012108

CLIENT NAME: Oxnard School District			PROJECT NAME/NO. 1011600537			P.O.NO.			AIRBILL NO:					
ADDRESS: 25 Cupania Circle, Monterey Park						ANALYSES REQUESTED						COOLER TEMP: <u>1.3°C</u>		
PROJECT MANAGER: Greg Buchanan			PHONE NO: 323-517-9780			FAX NO: 323.517.9781			<---PRESERVATION * REMARKS: _____ SAMPLE CONDITIONS/ CONTAINER/COMMENTS LAB TO COMPOSITE LAB TO COMPOSITE HOLD (8) DIFF HOLD 12/29 via e-mail HOLD HOLD HOLD HOLD					
SAMPLER NAME:			SIGNATURE:			Arsenic by EPA 6010B						OCPCs by EPA 8081A		
TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal														
CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other														
UST PROJECT: Y N GLOBAL ID#: -----														
SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPCs by EPA 8081A		
				WATER	SOIL	SLUDGE	OTHER		#	TYPE				
	<u>2/12/16</u>		Comp 3 @ 0.5'		X			N		G		X		
			Comp 3 @ 2'		X			N		G		X		
		<u>807</u>	SB-9 @ 0.5'		X			N	1	G				
		<u>808</u>	SB-9 @ 2'		X			N	1	G				
		<u>815</u>	SB-10 @ 0.5'		X			N	1	G				
		<u>817</u>	SB-10 @ 2'		X			N	1	G				
		<u>910</u>	SB-11 @ 0.5'		X			N	2	G	X			
		<u>916</u>	SB-11 @ 2'		X			N	1	G				
		<u>922</u>	SB-12 @ 0.5'		X			N	1	G				
		<u>924</u>	SB-12 @ 2'		X			N	1	G				

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>3:16</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/16 PAGE: 4 OF 10
 FILE NO.: _____ LAB NO.: 1012108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. _____ AIRBILL NO: _____

ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED _____ COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION * _____

SAMPLER NAME: _____ SIGNATURE: _____ REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/16</u>		Comp 4 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 4 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD (10/18/16) HOLD 12/29 via e-mail
		<u>958</u>	SB-13 @ 0.5'		X			N	1	G									
		<u>1061</u>	SB-13 @ 2'		X			N	1	G									HOLD
		<u>1003</u>	SB-14 @ 0.5'		X			N	2	G	X								
		<u>1003</u>	SB-14 @ 0.5' DUP		X			N	1	G	X								
		<u>1006</u>	SB-14 @ 2'		X			N	1	G									HOLD
		<u>1127</u>	SB-15 @ 0.5'		X			N	1	G									
		<u>1129</u>	SB-15 @ 2'		X			N	1	G									HOLD
		<u>1122</u>	SB-16 @ 0.5'		X			N	1	G									
		<u>1124</u>	SB-16 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	SAMPLE DISPOSITION
		<u>12/14/16</u>	<u>2:40</u>	1. Samples returned to client? Yes No
		<u>12/14/16</u>	<u>3:10</u>	2. Samples will not be stored over 30 days, unless additional storage time is requested
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	3. Storage time requested: _____ days,
				By: _____ Date: _____

SPECIAL INSTRUCTION: _____

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/04 PAGE: 5 OF 10
 FILE NO.: LAB NO.: 1012/08

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.3°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS:

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCps by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/04</u>		Comp 5 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 5 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD <u>5.0% HOLD 12/24 VIG-Mul</u>
		<u>1010</u>	SB-17 @ 0.5'		X			N	1	G									HOLD
		<u>1012</u>	SB-17 @ 2'		X			N	1	G									HOLD
		<u>1015</u>	SB-18 @ 0.5'		X			N	1	G									HOLD
		<u>1017</u>	SB-18 @ 2'		X			N	1	G									HOLD
		<u>1116</u>	SB-19 @ 0.5'		X			N	1	G									HOLD
		<u>1118</u>	SB-19 @ 2'		X			N	1	G									HOLD
		<u>1110</u>	SB-20 @ 0.5'		X			N	2	G	X								
		<u>1113</u>	SB-20 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/04</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/04</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/14/16 PAGE: 2 OF 10
 FILE NO.: LAB NO.: 16/2/08

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:

ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.6°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 ←-PRESERVATION *

SAMPLER NAME: SIGNATURE: REMARKS:

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A						SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE								
	<u>12/13/16</u>		Comp 6 @ 0.5'		X			N		G		X						LAB TO COMPOSITE
			Comp 6 @ 2'		X			N		G		X						LAB TO COMPOSITE HOLD 8/10/16 HOLD 12/20 via e-mail
			Comp 6 @ 0.5' DUP		X			N	1	G		X						LAB TO COMPOSITE
		<u>1020</u>	SB-21 @ 0.5'		X			N	2	G								
		<u>1022</u>	SB-21 @ 2'		X			N	1	G								HOLD
		<u>1027</u>	SB-22 @ 0.5'		X			N	2	G								
		<u>1029</u>	SB-22 @ 2'		X			N	1	G								HOLD
		<u>1104</u>	SB-23 @ 0.5'		X			N	2	G								
		<u>1106</u>	SB-23 @ 2'		X			N	1	G								HOLD
		<u>1059</u>	SB-24 @ 0.5'		X			N	3	G	X							
		<u>1101</u>	SB-24 @ 2'		X			N	1	G								HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): <u>Lupe Gutierrez</u>	Date: <u>12/14/16</u>	Time: <u>3:00</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/15/16 PAGE: 7 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600538** P.O.NO. AIRBILL NO:
 ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED COOLER TEMP: 1.6°C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPs by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/15/16</u>		Comp 7 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 7 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD KID OFF HOLD 12/29 via e-mail
		<u>1523</u>	SB-25 @ 0.5'		X			N	1	G									HOLD
		<u>1325</u>	SB-25 @ 2'		X			N	1	G									HOLD
		<u>1318</u>	SB-26 @ 0.5'		X			N	2	G	X								
		<u>1320</u>	SB-26 @ 2'		X			N	1	G									HOLD
		<u>1336</u>	SB-27 @ 0.5'		X			N	1	G									
		<u>1338</u>	SB-27 @ 2'		X			N	1	G									HOLD
		<u>1341</u>	SB-28 @ 0.5'		X			N	1	G									
		<u>1343</u>	SB-28 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/14 PAGE: 8 OF 10
 FILE NO.: LAB NO.: 1412108

CLIENT NAME: **Oxnard School District** PROJECT NAME/NO. **1011600538** P.O.NO. AIRBILL NO:
 ADDRESS: **25 Cupania Circle, Monterey Park** ANALYSES REQUESTED COOLER TEMP: 1.6°C

PROJECT MANAGER: **Greg Buchanan** PHONE NO: **323-517-9780** FAX NO: **323.517.9781** ←-PRESERVATION *

SAMPLER NAME: SIGNATURE: REMARKS:
 TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other
 UST PROJECT: **Y N** GLOBAL ID#: -----

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	Lead by EPA 6010B	OCPS by EPA 8081A					SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE								
	<u>12/13/14</u>		Comp 8 @ 0.5'		X			N		G		X						LAB TO COMPOSITE
			Comp 8 @ 2'		X			N		G		X						LAB TO COMPOSITE HOLD <u>5.0 off HOLD 12/24 vial e-mail</u>
		<u>1312</u>	SB-29 @ 0.5'		X			N	1	G								
		<u>1314</u>	SB-29 @ 2'		X			N	1	G								HOLD
		<u>1307</u>	SB-30 @ 0.5'		X			N	1	G								
		<u>1309</u>	SB-30 @ 2'		X			N	1	G								HOLD
		<u>1346</u>	SB-31 @ 0.5'		X			N	1	G								
		<u>1348</u>	SB-31 @ 2'		X			N	1	G								HOLD
		<u>1350</u>	SB-32 @ 0.5'		X			N	2	G	X							
	<u>X</u>	<u>1352</u>	SB-32 @ 2'		X			N	1	G								HOLD

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/14</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 (213) 745-5312 FAX (213) 745-6372

DATE: 12/13/10 PAGE: 9 OF 10
 FILE NO.: LAB NO.: 1412108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600538 P.O.NO. _____ AIRBILL NO: _____
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED _____ COOLER TEMP: 1.4°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION * _____

SAMPLER NAME: _____ SIGNATURE: _____ REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal

CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCPS by EPA 8081A							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	<u>12/13/10</u>		Comp 9 @ 0.5'		X			N		G		X							LAB TO COMPOSITE
			Comp 9 @ 2'		X			N		G		X							LAB TO COMPOSITE HOLD <u>Diff hold 13ha vial - mdf</u>
		<u>1301</u>	SB-33 @ 0.5'		X			N	2	G	X								
		<u>1303</u>	SB-33 @ 2'		X			N	1	G									HOLD
		<u>1257</u>	SB-34 @ 0.5'		X			N	1	G									
		<u>1257</u>	SB-34 @ 2'		X			N	1	G									HOLD
		<u>1355</u>	SB-35 @ 0.5'		X			N	1	G									
		<u>1357</u>	SB-35 @ 2'		X			N	1	G									HOLD
		<u>1402</u>	SB-36 @ 0.5'		X			N	1	G									
		<u>1404</u>	SB-36 @ 2'		X			N	1	G									HOLD

Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/10</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): <u>[Signature]</u>	Received by (Signature & Name): <u>[Signature]</u>	Date: <u>12/14/10</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:

* PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



CHAIN OF CUSTODY AND ANALYSIS REQUEST

781 East Washington Blvd., Los Angeles, CA 90021
 [213] 745-5312 FAX [213] 745-6372

DATE: 12/10/16 PAGE: 10 OF 10
 FILE NO.: LAB NO.: 1612108

CLIENT NAME: Oxnard School District PROJECT NAME/NO. 1011600537 P.O.NO. AIRBILL NO:
 ADDRESS: 25 Cupania Circle, Monterey Park ANALYSES REQUESTED COOLER TEMP: 1.4°C

PROJECT MANAGER: Greg Buchanan PHONE NO: 323-517-9780 FAX NO: 323.517.9781 <---PRESERVATION *
 SAMPLER NAME: SIGNATURE: REMARKS: _____

TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal
 CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other

UST PROJECT: Y N GLOBAL ID#: _____

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		Arsenic by EPA 6010B	OCps by EPA 8081A								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE										
	<u>12/13/16</u>	<u>1420</u>	EQ Blank 1	X				N	G	X	X									
			Temp blank	X				N	G											

Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>2:40</u>	SAMPLE DISPOSITION 1. Samples returned to client? Yes No 2. Samples will not be stored over 30 days, unless additional storage time is requested 3. Storage time requested: _____ days, By: _____ Date: _____
Relinquished by (Signature & Name): 	Received by (Signature & Name): 	Date: <u>12/14/16</u>	Time: <u>3:10</u>	
Relinquished by (Signature & Name):	Received by (Signature & Name):	Date:	Time:	

SPECIAL INSTRUCTION:
 * PRESERVATION: 1-HNO₃, 2-H₂SO₄, 3-HCL, 4-Zinc Acetate, 5-NaOH, 6-NH₄ Buffer, 7-Other



December 15, 2016

Ms. Melissa Smith
ATC Group Services, LLC
25 Cupania Circle
Monterey Park, CA 91755

Dear Ms. Smith:

This letter presents the results of the soil vapor investigation conducted by Optimal Technology (Optimal), for ATC Group Services, LLC on December 14, 2016. The study was performed at the Southeast corner of Doris Ave. & N. Patterson Rd., Oxnard, California.

Optimal was contracted to perform a soil vapor survey at this site to screen for possible Methane and Hydrogen Sulfide.

Gas Sampling Method

At each sampling location an electric vacuum pump set to draw 0.2 liters per minute (L/min) of soil vapor was attached to the probe and purged prior to sample collection. Vapor samples were obtained in Hamilton gas-tight syringes by puncturing tubing which connects the sampling probe and the vacuum pump. New tubing was used at each sampling point to prevent cross contamination. Samples were immediately injected into the gas chromatograph after collection.

All analyses were performed on a laboratory grade Hewlett Packard model 5890 Series II gas chromatograph equipped with a Flame Ionization Detector (FID) and an Electron Capture Detector (ECD). Restec wide bore capillary columns using hydrogen as the carrier gases were used to perform all analysis. All results were collected on a personal computer utilizing Hewlett Packard's PC based chromatographic data collection and handling system. Additionally, a Landtec GEM2000 plus was used to test for Hydrogen Sulfide.

Quality Assurance

5-Point Calibration

The initial five point calibration consisted of 20, 50, 100, 200 and 500 ul injections of the calibration standard. A calibration factor on each analyte was generated using a best fit line method using the HP data system. If the r^2 factor generated from this line was not greater than 0.990, an additional five point calibration would have been performed. Method reporting limits were calculated to be 1.0-10.0 parts per million by volume (ppmV) for the individual compounds.

A daily calibration check and end of run calibration check was performed by preparing a calibration gas from Airgas and from a pre-mixed standard supplied by CPI International.

Sample Replicates

A replicate analysis (duplicate) was run to evaluate the reproducibility of the sampling system and instrument. The difference between samples did not vary more than 20%.

Equipment Blanks

Blanks were run at the beginning of each workday and after calibrations. The blanks were collected using an ambient air sample. These blanks checked the septum, syringe, GC column, GC detector and the ambient air. Contamination was not found in any of the blanks analyzed during this investigation. Blank results are given along with the sample results.

Tracer Gas Leak Test

A tracer gas was applied to the soil gas probes at each point of connection in which ambient air could enter the sampling system. These points include the top of the sampling probe where the tubing meets the probe connection and the surface bentonite seals. Isobutane was used as the tracer gas. No Isobutane was found in any of the samples collected.

Purge Volume

The standard purge volume of three volumes was purged in accordance with the July 2015 DTSC/RWQCB Advisory for Active Soil Gas Investigations.

Shut-in Test

A shut-in test was conducted prior to purging or sampling each location to check for leaks in the above-ground sampling system. The system was evaluated to a minimum measured vacuum of 100 inches of water. The vacuum gauge was calibrated and sensitive enough to indicate a water pressure change of at least 0.5 inches.

Scope of Work

To achieve the objective of this investigation a total of 21 vapor samples were collected from 10 locations throughout the site. Sampling depths, vacuum readings, purge volume and sampling volumes are given on the analytical results page. All the collected vapor samples were analyzed on-site using Optimal's mobile laboratory.

Subsurface Conditions

Subsurface soil conditions at this site offered sampling flows at 0" water vacuum.

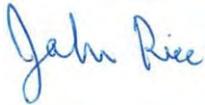
Results

During this vapor investigation five samples contained levels of Methane. Methane levels ranged from 10.28 ppmV to 15.26 ppmV. A complete table of analytical results is included with this report.

Disclaimer

All conclusions presented in this letter are based solely on the information collected by the soil vapor survey conducted by Optimal Technology. Soil vapor testing is only a subsurface screening tool and does not represent actual contaminant concentrations in either the soil and/or groundwater. We enjoyed working with you on this project and look forward to future projects. If you have any questions please contact me at (877) 764-5427.

Sincerely,



John Rice
Project Manager



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** HP-5890 Series II
Method: Modified EPA 8015 **Detector:** FID **Page:** 1 of 6

SAMPLE ID
Sampling Depth (Ft.)
Purge Volume (ml)
Vacuum (in. of Water)
Injection Volume (ul)
Dilution Factor (FID)

BLANK-1	SV-1-5'	SV-1-10'	SV-5-5'	SV-5-10'	SV-4-5'	SV-4-10'	SV-2-5'
N/A	5.0	10.0	5.0	10.0	5.0	10.0	5.0
N/A	790	870	790	870	790	870	790
N/A	0	0	0	0	0	0	0
2500	2500	2500	2500	2500	2500	2500	2500
1	1	1	1	1	1	1	1

COMPOUND	REP. LIMIT
Methane	10.00
Isobutane (Tracer Gas)	1.00

| CONC (ppmV) |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ND | ND | ND | 10.28 | ND | ND | 15.22 | 14.09 |
| ND |

Note: ND = Below Listed Reporting Limit



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** HP-5890 Series II
Method: Modified EPA 8015 **Detector:** FID **Page:** 2 of 6

SAMPLE ID	SV-2-10'	SV-3-5'	SV-3-10'	SV-10-5'	SV-10-10'	SV-9-5'	SV-9-10'	SV-8-5'
Sampling Depth (Ft.)	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Purge Volume (ml)	870	790	870	790	870	790	870	790
Vacuum (in. of Water)	0	0	0	0	0	0	0	0
Injection Volume (ul)	2500	2500	2500	2500	2500	2500	2500	2500
Dilution Factor (FID)	1	1	1	1	1	1	1	1

COMPOUND	REP. LIMIT	CONC (ppmV)						
Methane	10.00	ND	15.26	ND	ND	ND	13.51	ND
Isobutane (Tracer Gas)	1.00	ND						

Note: ND = Below Listed Reporting Limit



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** HP-5890 Series II
Method: Modified EPA 8015 **Detector:** FID **Page:** 3 of 6

SAMPLE ID
Sampling Depth (Ft.)
Purge Volume (ml)
Vacuum (in. of Water)
Injection Volume (ul)
Dilution Factor (FID)

SV-8-10'	SV-7-5'	SV-7-10'	SV-6-5'	SV-6-10'	SV-6-10' Dup		
10.0	5.0	10.0	5.0	10.0	10.0		
870	790	870	790	870	870		
0	0	0	0	0	0		
2500	2500	2500	2500	2500	2500		
1	1	1	1	1	1		

COMPOUND	REP. LIMIT
Methane	10.00
Isobutane (Tracer Gas)	1.00

CONC (ppmV)							
ND	ND	ND	ND	ND	ND		
ND	ND	ND	ND	ND	ND		

Note: ND = Below Listed Reporting Limit



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** Landtec GEM2000 Plus
Page: 4 of 6

SAMPLE ID
Sampling Depth (Ft.)
Purge Volume (ml)
Vacuum (in. of Water)

BLANK-1	SV-1-5'	SV-1-10'	SV-5-5'	SV-5-10'	SV-4-5'	SV-4-10'	SV-2-5'
N/A	5.0	10.0	5.0	10.0	5.0	10.0	5.0
N/A	790	870	790	870	790	870	790
N/A	0	0	0	0	0	0	0

COMPOUND	REP. LIMIT
Hydrogen Sulfide	1.00

| CONC (ppm) |
|------------|------------|------------|------------|------------|------------|------------|------------|
| ND |

Note: ND = Below Listed Reporting Limit



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** Landtec GEM2000 Plus
Page: 5 of 6

SAMPLE ID
Sampling Depth (Ft.)
Purge Volume (ml)
Vacuum (in. of Water)

SV-2-10'	SV-3-5'	SV-3-10'	SV-10-5'	SV-10-10'	SV-9-5'	SV-9-10'	SV-8-5'
10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
870	790	870	790	870	790	870	790
0	0	0	0	0	0	0	0

COMPOUND	REP. LIMIT
Hydrogen Sulfide	1.00

| CONC (ppm) |
|------------|------------|------------|------------|------------|------------|------------|------------|
| ND |

Note: ND = Below Listed Reporting Limit



SOIL VAPOR RESULTS

Site Name: SE Corner of Doris Ave. & N. Patterson Rd., Oxnard, CA **Lab Name:** Optimal Technology **Date:** 12/14/16
Analyst: J. Rice **Collector:** J. Rice **Inst. ID:** Landtec GEM2000 Plus **Page:** 6 of 6

SAMPLE ID
Sampling Depth (Ft.)
Purge Volume (ml)
Vacuum (in. of Water)

SV-8-10'	SV-7-5'	SV-7-10'	SV-6-5'	SV-6-10'	SV-6-10' Dup		
10.0	5.0	10.0	5.0	10.0	10.0		
870	790	870	790	870	870		
0	0	0	0	0	0		

COMPOUND	REP. LIMIT
Hydrogen Sulfide	1.00

CONC (ppm)							
ND	ND	ND	ND	ND	ND		

Note: ND = Below Listed Reporting Limit

APPENDIX C

HUMAN HEALTH SCREENING CALCULATIONS (TABLES C-1 THROUGH C-25)

Table C-1
Descriptive Statistical Summary for Soil Samples
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituent	Sample Summary ^a			Concentration Range and Summary ^a						95% Upper Confidence Limit (UCL) ^c	Exposure Point Concentration ^d		
	Total Soil Samples Analyzed	Samples Detected	Percent Detected	Laboratory Detection Limit	Minimum Detected	Location of Minimum	Maximum Detected	Location of Maximum	Arithmetic Mean ^b		(mg/kg)	(mg/kg)	Basis
				(mg/kg)	(mg/kg)		(mg/kg)						
Metals													
Arsenic	10	10	100%	NA	3.01	SB-14 @0.5 (Dup)	3.76	SB-33 @ 0.5	3.37	NA	NQ	--	
Organochlorine Pesticides													
4,4'-DDD (DDD)	19	14	74%	0.008	0.0120	Comp 4 (2 fbg)	0.0461	Comp 9 (0.5 fbg)	0.0314	NA	0.0461	Max	
4,4'-DDE (DDE)	19	19	100%	NA	0.0601	Comp 6 (2 fbg)	0.646	Comp 9 (0.5 fbg)	0.369	NA	0.646	Max	
4,4'-DDT (DDT)	19	19	100%	NA	0.0204	Comp 6 (2 fbg)	0.358	Comp 9 (0.5 fbg)	0.177	NA	0.358	Max	
alpha Chlordane	19	4	21%	0.008	0.0081	Comp 3 (0.5 fbg)	0.00901	Comp 7 (0.5 fbg)	0.00845	NA	0.00901	Max	
gamma Chlordane	19	10	53%	0.008	0.00821	Comp 3 (0.5 fbg)	0.0115	Comp 8 (0.5 fbg)	0.00963	NA	0.0115	Max	
Dieldrin	19	15	79%	0.008	0.00895	Comp 3 (2 fbg)	0.0242	Comp 2 (0.5 fbg)	0.0177	NA	0.0242	Max	
Endrin	19	19	100%	NA	0.00896	Comp 6 (2 fbg)	0.0858	Comp 9 (0.5 fbg)	0.0444	NA	0.0858	Max	
Methoxychlor	19	1	5%	0.040	0.231	Comp 7 (2 fbg)	0.231	Comp 7 (2 fbg)	0.231	NA	0.231	Max	
Toxaphene	18	18	100%	0.120	0.218	Comp 6 (2 fbg)	2.51	Comp 9 (0.5 fbg)	1.49	NA	2.51	Max	

Abbreviations:

-- = not applicable
mg/kg = milligrams per kilogram
NA = Not Applicable or Not Available
NQ = Not Quantified, as the maximum concentration of arsenic is below representative background levels
Max = Maximum detected value from all samples analyzed

Footnotes:

^a Data set used in this evaluation includes duplicate samples.
^b Arithmetic mean calculated from detected values only
^c The 95% upper confidence limit (UCL) was not calculated for the purpose of this analysis.
^d The EPC is the maximum concentration detected in all soil samples (including duplicates).

Table C-2
Summary of Exposure Parameters
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Exposure Parameter	Symbol	Units	Residential Receptor		School Receptors		Construction Worker
			Adult	Child	Adult Staff	Child Student	
Common Exposure Parameters							
Exposure Frequency	EF	days/year	350	350	180	180	250
Exposure Duration	ED	year	20	6	25	9	1
Body Weight	BW	kg	80	15	80	35	80
Averaging Time-Non-cancer	ATnc	days	7,300	2,190	9,125	3,285	365
Averaging Time-Cancer	ATca	days	25,550	25,550	25,550	25,550	25,550
Inhalation							
Exposure Time	ET	hours/day	24	24	8	8	8
Incidental Soil Ingestion							
Ingestion Rate	IngR	mg/day	100	200	100	72	330
Dermal Contact with Soil							
Skin Surface Area	SA	cm ²	6032	2900	6032	2900	6032
Soil-to-Skin Adherence Factor	SAF	mg/cm ² -day	0.07	0.2	0.2	0.2	0.8

Abbreviations:

cm² = centimeter squared
kg = kilograms
mg/cm²-day= milligrams per centimeter squared per day
mg/day= milligrams per day

References

Common Exposure Parameters

Exposure frequency from DTSC, 2014
Exposure durations from DTSC, 2014
Body weight from DTSC, 2014
Body weight for child students represents the average body weight between the ages of 5 and 13
Averaging time for noncarcinogens equals exposure duration (years) x 365 days per year (DTSC, 2014)
Averaging time for carcinogens equal 365 days/year x 70 years (DTSC, 2014)

Inhalation

Exposure time:
Residential assumes a full day (24-hour) exposure (USEPA, 2009) for both indoor and ambient exposure scenarios
Site workers, Students, and construction workers assumed to have an eight hour work day (DTSC, 2014)

Incidental Ingestion of Soil

Soil ingestion rates for residential and construction receptors from DTSC, 2014
Soil ingestion rates for students based on ingestion rate and fraction of time spent at school (OEHHA, 2004)

Dermal Contact with Soil

Skin surface area from DTSC, 2014
Soil-to-Skin adherence factor from DTSC, 2014

Department of Toxic Substances Control (DTSC), 2014, Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities, Office of Human and Ecological Risk (HERO), HERO Human Health Risk Assessment (HHRA)
Note Number: 1, Issue Date: September 30, 2014

Office of Environmental Health Hazard Assessment (OEHHA), Integrated Risk Assessment Section, Guidance for Assessing Exposures and Health Risks at Existing and Proposed School Sites. Final Report. February.

United States Environmental Protection Agency (USEPA), 2009, Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment), Final: Office of Superfund Remediation and Technology Innovation, Washington, D.C.

Table C-3
Summary of Constituent Toxicity Criteria
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituent	Carcinogenic Endpoints									Chronic Noncarcinogenic Endpoints						
	Oral			Dermal ^c		Inhalation				Oral		Dermal ^c		Inhalation		
	Slope Factor (SFo) (mg/kg-day) ⁻¹	Source ^a	Weight-of-evidence ^b	Dermal Adjustment Factor (ABS _{GI})	Slope Factor (SFd) (mg/kg-day) ⁻¹	Unit Risk Factor (URF) (µg/m ³) ⁻¹	Slope Factor (SFI) (mg/kg-day) ⁻¹	Source ^a	Weight-of-evidence ^b	Reference Dose (RfDo) (mg/kg-day)	Source ^a	Dermal Adjustment Factor (ABS _{GI})	Reference Dose (RfDd) (mg/kg-day)	Reference Concentration (RFC) (µg/m ³)	Reference Dose (RfDi) (mg/kg-day)	Source ^a
Organochlorine Pesticides																
4,4'-DDD (DDD)	2.4E-01	IRIS	B2	1	2.40E-01	6.9E-05	2.4E-01	IRIS	B2	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE (DDE)	3.4E-01	IRIS	B2	1	3.40E-01	9.7E-05	3.4E-01	IRIS	B2	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT (DDT)	3.4E-01	IRIS	B2	1	3.40E-01	9.7E-05	3.4E-01	IRIS	B2	5.0E-04	IRIS	1	5.00E-04	4.00E-01	5.0E-04	EXTR
alpha Chlordane	1.3E+00	OEHHA	B2	1	1.30E+00	3.4E-04	1.2E+00	OEHHA	B2	3.3E-05	OEHHA _{ch}	1	3.30E-05	7.00E-01	2.0E-04	IRIS
gamma Chlordane	1.3E+00	OEHHA	B2	1	1.30E+00	3.4E-04	1.2E+00	OEHHA	B2	3.3E-05	OEHHA _{ch}	1	3.30E-05	7.00E-01	2.0E-04	IRIS
Dieldrin	1.6E+01	IRIS	B2	1	1.60E+01	4.6E-03	1.6E+01	IRIS	B2	5.0E-05	IRIS	1	5.00E-05	NA	NA	NA
Endrin	NA	NA	D	NA	NA	NA	NA	NA	D	3.0E-04	IRIS	1	3.00E-04	2.00E-01	3.0E-04	EXTR
Methoxychlor	NA	NA	D	NA	NA	NA	NA	NA	D	2.0E-05	OEHHA _{ch}	1	2.00E-05	1.00E-02	2.0E-05	EXTR
Toxaphene	1.2E+00	OEHHA	B2	1	1.20E+00	3.4E-04	1.2E+00	OEHHA	B2	NA	NA	NA	NA	NA	NA	NA

Abbreviations:

-- = Not applicable
mg/kg-day = milligrams per kilograms-day
NA = Not Applicable or Not Available
µg/m³ = micrograms per cubic meter

Footnotes:

^a Sources for the toxicity criteria include the following:
ATSDR = Agency for Toxic Substances Disease Registry, from United States Environmental Protection Agency (USEPA) May 2016 Regional Screening Levels for Chemical Contaminants at Superfund Sites
HEAST = Health Effects Assessment Summary Tables (HEAST), from USEPA May 2016 Regional Screening Levels for Chemical Contaminants at Superfund Sites
IRIS = Integrated Risk Information System (IRIS) Data Base, USEPA accessed January 2017
NJDEP = New Jersey Department of Environmental Protection, from USEPA May 2016 Regional Screening Levels for Chemical Contaminants at Superfund Sites
OEHHA = Office of Environmental Health Hazard Assessment (OEHHA), OEHHA accessed January 2017, Toxicity Criteria Database.
OEHHA_{ch} = Child-Specific RfD from Office of Environmental Health Hazard Assessment (OEHHA, 2005), as referenced in OEHHA Toxicity Criteria Database, accessed January 2017
PPRTV = Provisional Peer Reviewed Toxicity Values, from USEPA May 2016 Regional Screening Levels for Chemical Contaminants at Superfund Sites
RSLs = Regional Screening Levels, from USEPA May 2016 Regional Screening Levels for Chemical Contaminants at Superfund Sites
EXTR = Inhalation RfD extrapolated from Oral RfD and Converted to Child RfC by multiplying by 15 kg and dividing by 20 m³/day

^b Weight-of-Evidence (Guidelines for Carcinogen Risk Assessment, Final, EPA/630/R-03/001F, March 2005.)
A = Known human carcinogen
B1 = Probable human carcinogen - based on limited evidence of carcinogenicity in humans (or Group 2A per IARC classification)
B2 = Likely to be carcinogenic to humans based on strong evidence of carcinogenicity in animals and inconclusive evidence of carcinogenicity in an exposed human population
C = Possible human carcinogen
D = Inadequate evidence to assess carcinogenic potential
ID = Inadequate information to assess carcinogenic potential according to the Draft U.S. EPA 1999 or the Final 2005 Guidelines for Carcinogen Risk Assessment
Oral Reference Doses for Chordane and Methoxychlor are based on child-specific values (OEHHA, 2005)

^c The dermal slope factors and reference doses were calculated using the following equations:
SFd = SFo x 1/ABS_{GI}
RfDd = RfDo x ABS_{GI}

Table C-4
Calculation of Particulate Emission Factor for Fugitive Dust
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Factors	Symbols	Units	Values	References
Respirable Fraction	RF	g/m ² -hr	0.036	Default (EPA, 1991b)
Fraction of Vegetation Cover	V	unitless	0.5	Default (EPA, 1991b)
Mean Annual Wind Speed	U _m	m/s	4.69	Default (EPA, 1996)
Threshold Wind Speed	U _t	m/s	11.32	Default (EPA, 1996)
Function Specific to Model	F _x	unitless	1.94E-01	Default (Cowherd, 1985; EPA, 1996)
Total Dust Flux (<10 Um)	E	g/m ² -hr	2.5E-04	Calculated
Area of Impacted Soil Exposed ^a	A	m ²	2.03E+03	Default (0.5 Acre)
Wind speed in mixing zone	WS	m/s	2.25E+00	Default (EPA, 1991b)
Length of Soil Perpendicular to Wind Direction	LS	m	45	Site Specific (estimated)
Mixing Height	MH	m	2	Default (EPA, 1991b)
Default Particulate Emission Factor (DTSC)	PEF	m ³ /kg	1.00E+06	Default

Equations
Total Dust Flux (<10 Um) $E = RF \times (1-V) \times (U_m/U_t)^3 \times F_x$

Abbreviations:

g/kg = grams per kilogram
 g/m²-hr = grams per meter squared per hour
 m = meter
 m/s = meters per second
 m² = meter squared
 m³/kg = cubic meter per kilogram

Footnotes:

^a Area of impacted soil is set equal to default area of 0.5 acres.

References:

Cowherd, C., G. Muleski, P. Engelhart, and D. Gillette. 1985. Rapid Assessment of Exposure to Particulate Emissions from Surface Contamination. EPA/600/8-85/002. NTIS PB85-192219. Office of Health and Environmental Assessment, United States Environmental Protection Agency, Washington, DC.

Department of Toxic Substances Control, HERO HHRA Note Number 1, http://www.dtwc.ca.gov/AssessingRisk/upload/HHRA_Note_1-2.pdf

United States Environmental Protection Agency (USEPA), 1991b, Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals. Publication 9285.7-01B. December).

USEPA, 1996, Soil Screening Guidance: Technical Background Document. EPA/540/R95/128. May.

**Table C-5
Incidental Ingestion of Soil - Residential Receptor
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California**

Constituents	Exposure Point Concentration (EPC) in Soil ^a	Average Daily Dose ^b	Oral Chronic Reference Dose ^c	Hazard Quotient ^b	Lifetime Daily Dose	Oral Slope Factor ^c	Incremental Cancer Risk
	Cs	ADD	RfDo	HQ	LDD	SFo	CR
	(mg/kg)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	5.9E-07	NA	NA	6.6E-08	2.4E-01	1.6E-08
4,4'-DDE (DDE)	0.646	8.3E-06	NA	NA	9.3E-07	3.4E-01	3.2E-07
4,4'-DDT (DDT)	0.358	4.6E-06	5.0E-04	9.2E-03	5.1E-07	3.4E-01	1.8E-07
alpha Chlordane	0.00901	1.2E-07	3.3E-05	3.5E-03	1.3E-08	1.3E+00	1.7E-08
gamma Chlordane	0.0115	1.5E-07	3.3E-05	4.5E-03	1.7E-08	1.3E+00	2.2E-08
Dieldrin	0.0242	3.1E-07	5.0E-05	6.2E-03	3.5E-08	1.6E+01	5.6E-07
Endrin	0.0858	1.1E-06	3.0E-04	3.7E-03	1.2E-07	NA	NA
Methoxychlor	0.231	3.0E-06	2.0E-05	1.5E-01	3.3E-07	NA	NA
Toxaphene	2.51	3.2E-05	NA	NA	3.6E-06	1.2E+00	4.3E-06
Total Noncancer Hazard Index ^d =				0.17	Total Lifetime Cancer Risk ^d =		5.4E-06

Equations	
Noncancer	
Average Daily Dose (ADD)	Hazard Quotient (HQ)
$ADD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_{nc} \times BW)$	$HQ = AADD / RfDo$
Cancer	
Lifetime Daily Dose (LDD)	Excess Cancer Risk (CR)
$LDD = (Cs \times IngF \times EF \times FI \times CF_{kg/mg}) / AT_c$	$CR = LADD \times SFo$
Ingestion Rate Factor (IngF)	
$IngF = ([ED_c \times IngR_c] / BW_c) + ([ED_a \times IngR_a] / BW_a)$	

Abbreviations:

kg = kilograms
 kg/mg = kilograms per milligram
 mg/day = milligrams per day
 mg/kg = milligrams per kilogram
 mg/kg-d = milligrams per kilogram per day
 mg-yr/kg-day = milligrams-year per kilogram-day
 NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Fraction Ingested from Source	FI	1	unitless
Ingestion Rate	IngR	Table C-2	mg/day

Footnotes:

- a From Table C-1, maximum concentration of constituent detected in soil
 b The ADD was calculated for a child residential receptor, since the child represents the most sensitive residential receptor.
 c From Table C-3.
 d The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

**Table C-6
Dermal Contact with Soil - Residential Receptor
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California**

Constituents	Exposure Point Concentration in Soil ^a	Dermal Absorption Fraction from Soil ^b	Average Daily Dose ^c	Dermal Chronic Reference Dose ^d	Hazard Quotient ^c	Lifetime Daily Dose	Oral Slope Factor ^d	Incremental Cancer Risk ^e
	Cs	ABS _d	ADD	RfDd	HQ	LDD	SFo	CR
	(mg/kg)	(unitless)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides								
4,4'-DDD (DDD)	0.0461	0.05	8.5E-08	NA	NA	1.1E-08	2.4E-01	2.6E-09
4,4'-DDE (DDE)	0.646	0.05	1.2E-06	NA	NA	1.5E-07	3.4E-01	5.1E-08
4,4'-DDT (DDT)	0.358	0.05	6.6E-07	5.0E-04	1.3E-03	8.3E-08	3.4E-01	2.8E-08
alpha Chlordane	0.00901	0.05	1.7E-08	3.3E-05	5.1E-04	2.1E-09	1.3E+00	2.7E-09
gamma Chlordane	0.0115	0.05	2.1E-08	3.3E-05	6.5E-04	2.7E-09	1.3E+00	3.5E-09
Dieldrin	0.0242	0.05	4.5E-08	5.0E-05	9.0E-04	5.6E-09	1.6E+01	9.0E-08
Endrin	0.0858	0.05	1.6E-07	3.0E-04	5.3E-04	2.0E-08	NA	NA
Methoxychlor	0.231	0.05	4.3E-07	2.0E-05	2.1E-02	5.3E-08	NA	NA
Toxaphene	2.51	0.05	4.7E-06	NA	NA	5.8E-07	1.2E+00	7.0E-07
Total Noncancer Hazard Index ^e =					0.025	Total Lifetime Cancer Risk ^e =		8.7E-07

Equations	
Noncancer	
Average Daily Dose (ADD)	Hazard Quotient (HQ)
$ADD = (Cs \times SA \times SAF \times ABS_d \times EF \times ED \times CF_{kg/mg}) / (AT_{nc} \times BW)$	$HQ = ADD / RfDd$
Cancer	
Lifetime Daily Dose (LDD)	Excess Cancer Risk (CR)
$LDD = (Cs \times DF \times ABS_d \times EF \times CF_{kg/mg}) / AT_c$	$CR = LDD \times SFd$
Dermal Factor (DF)	
$DF = ([ED_c \times SA_c \times SAF_c] / BW_c) + ([ED_a \times SA_a \times SAF_a] / BW_a)$	

Abbreviations:

cm² = centimeter squared
 kg = kilograms
 kg/mg = kilograms per milligram
 mg/cm²-d = milligrams per centimeter squared per day
 mg/kg = milligrams per kilogram
 mg/kg-d = milligrams per kilogram per day
 mg-yr/kg-day = milligrams-year per kilogram-day
 NA = Not Applicable or Not Available

Footnotes:

^a From Table C-1, maximum concentration of constituent detected in soil
^b Dermal Exposure from DTSC, 2015, Department of Toxic Substances Control, Preliminary Endangerment Assessment Guidance Manual, Table 1: Screening Level Dermal Absorption Fractions from Soil. January 1994 (Revised October 2015).
^c The ADD was calculated for a child residential receptor, since the child represents the most sensitive residential receptor.
^d From Table C-3.
^e The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Dermal Factor	DF	338	mg-yr/kg-day
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Soil-to-Skin Adherence Factor	SAF	Table C-2	mg/cm ² -d
Surface Area	SA	Table C-2	cm ²

**Table C-7
Inhalation of Fugitive Dust - Residential Receptor
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California**

Constituents	Exposure Point Concentration in Soil ^a	Averaged Air Concentration ^b	Inhalation Chronic Reference Concentration ^c	Hazard Quotient ^b	Lifetime Air Concentration	Inhalation Unit Risk Factor ^c	Incremental Cancer Risk
	Cs	AAC	RfC	HQ	LAC	IUR	CR
	(mg/kg)	(µg/m ³)	(µg/m ³)	(unitless)	(µg/m ³)	(µg/m ³) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	4.4E-05	NA	NA	1.6E-05	6.9E-05	1.1E-09
4,4'-DDE (DDE)	0.646	6.2E-04	NA	NA	2.3E-04	9.7E-05	2.2E-08
4,4'-DDT (DDT)	0.358	3.4E-04	4.0E-01	8.6E-04	1.3E-04	9.7E-05	1.2E-08
alpha Chlordane	0.00901	8.6E-06	7.0E-01	1.2E-05	3.2E-06	3.4E-04	1.1E-09
gamma Chlordane	0.0115	1.1E-05	7.0E-01	1.6E-05	4.1E-06	3.4E-04	1.4E-09
Dieldrin	0.0242	2.3E-05	NA	NA	8.6E-06	4.6E-03	4.0E-08
Endrin	0.0858	8.2E-05	2.0E-01	4.1E-04	3.1E-05	NA	NA
Methoxychlor	0.231	2.2E-04	1.0E-02	2.2E-02	8.2E-05	NA	NA
Toxaphene	2.51	2.4E-03	NA	NA	8.9E-04	3.4E-04	3.0E-07
Total Noncancer Hazard Index ^d =				2.E-02	Total Lifetime Cancer Risk ^d =		3.8E-07

Equations	
Noncancer	
Averaged Air Concentration (AAC) AAC = ((Cs/PEF) x ET x EF x ED x CF _{µg/mg}) / (AT _{nc} x CF _{hr/d})	Hazard Quotient (HQ) HQ = AAC / RfC
Cancer	
Lifetime Air Concentration (LAC) LAC = ((Cs/PEF) x ET x EF x EDF x CF _{µg/mg}) / (AT _c x CF _{hr/d})	Excess Cancer Risk (CR) CR = LAC x IUR
Exposure Duration Factor (EDF) EDF = (ED _c + ED _a)	

Abbreviations:

kg = kilograms
m³/kg = cubic meter per kilogram
mg/kg = milligrams per kilogram
NA = Not Applicable or Not Available
µg/m³ = micrograms per cubic meter
µg/mg = micrograms per milligrams

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b The AAC was calculated for a child residential receptor, since the child represents the most sensitive residential receptor.
^c From Table C-3.
^d The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{hr/d}	24	hours/day
Conversion Factor	CF _{µg/mg}	1000	µg/mg
Exposure Duration	ED	Table C-2	years
Exposure Duration Factor	EDF	26	years
Exposure Frequency	EF	Table C-2	days/year
Exposure Time	ET	Table C-2	hours/day
Particulate Emission Factor	PEF	Table C-4	m ³ /kg

Table C-8
Incidental Ingestion of Soil - Site Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Average Daily Dose	Oral Chronic Reference Dose ^b	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^b	Incremental Cancer Risk
	Cs	ADD	RfDo	HQ	LDD	SFo	CR
	(mg/kg)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	2.8E-08	NA	NA	1.0E-08	2.4E-01	2.4E-09
4,4'-DDE (DDE)	0.646	4.0E-07	NA	NA	1.4E-07	3.4E-01	4.8E-08
4,4'-DDT (DDT)	0.358	2.2E-07	5.0E-04	4.4E-04	7.9E-08	3.4E-01	2.7E-08
alpha Chlordane	0.00901	5.6E-09	3.3E-05	1.7E-04	2.0E-09	1.3E+00	2.6E-09
gamma Chlordane	0.0115	7.1E-09	3.3E-05	2.1E-04	2.5E-09	1.3E+00	3.3E-09
Dieldrin	0.0242	1.5E-08	5.0E-05	3.0E-04	5.3E-09	1.6E+01	8.5E-08
Endrin	0.0858	5.3E-08	3.0E-04	1.8E-04	1.9E-08	NA	NA
Methoxychlor	0.231	1.4E-07	2.0E-05	7.1E-03	5.1E-08	NA	NA
Toxaphene	2.51	1.5E-06	NA	NA	5.5E-07	1.2E+00	6.6E-07
Total Noncancer Hazard Index ^c =				0.008	Total Lifetime Cancer Risk ^c =		8.3E-07

Equations	
Noncancer	
Average Daily Dose (ADD)	Hazard Quotient (HQ)
$ADD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_{nc} \times BW)$	$HQ = AADD / RfDo$
Cancer	
Lifetime Daily Dose (LDD)	Excess Cancer Risk (CR)
$LDD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_c \times BW)$	$CR = LADD \times SFo$

Abbreviations:

kg = kilograms
kg/mg = kilograms per milligram
mg/day = milligrams per day
mg/kg = milligrams per kilogram
mg/kg-d = milligrams per kilogram per day
NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Fraction Ingested from Source	FI	1	unitless
Ingestion Rate	IngR	Table C-2	mg/day

Footnotes:

^a From Table C-1, maximum concentration of constituent detected in soil

^b From Table C-6.

^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

**Table C-9
Dermal Contact with Soil - Site Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California**

Constituents	Exposure Point Concentration in Soil ^a	Dermal Absorption Fraction from Soil ^b	Average Daily Dose	Dermal Chronic Reference Dose ^c	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^c	Incremental Cancer Risk
	Cs	ABS _d	ADD	RfDd	HQ	LDD	SFo	CR
	(mg/kg)	(unitless)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides								
4,4'-DDD (DDD)	0.0461	0.05	1.7E-08	NA	NA	6.1E-09	2.4E-01	1.5E-09
4,4'-DDE (DDE)	0.646	0.05	2.4E-07	NA	NA	8.6E-08	3.4E-01	2.9E-08
4,4'-DDT (DDT)	0.358	0.05	1.3E-07	5.0E-04	2.7E-04	4.8E-08	3.4E-01	1.6E-08
alpha Chlordane	0.00901	0.05	3.4E-09	3.3E-05	1.0E-04	1.2E-09	1.3E+00	1.6E-09
gamma Chlordane	0.0115	0.05	4.3E-09	3.3E-05	1.3E-04	1.5E-09	1.3E+00	2.0E-09
Dieldrin	0.0242	0.05	9.0E-09	5.0E-05	1.8E-04	3.2E-09	1.6E+01	5.1E-08
Endrin	0.0858	0.05	3.2E-08	3.0E-04	1.1E-04	1.1E-08	NA	NA
Methoxychlor	0.231	0.05	8.6E-08	2.0E-05	4.3E-03	3.1E-08	NA	NA
Toxaphene	2.51	0.05	9.3E-07	NA	NA	3.3E-07	1.2E+00	4.0E-07
Total Noncancer Hazard Index ^d =					0.005	Total Lifetime Cancer Risk ^d =		5.0E-07

Equations	
Noncancer Average Daily Dose (ADD) ADD = (Cs x SA x SAF x ABS _d x EF x ED x CF _{kg/mg}) / (AT _{nc} x BW)	Hazard Quotient (HQ) HQ = ADD / RfDd
Cancer Lifetime Daily Dose (LDD) LDD = (Cs x ED x SA x SAF x ABS _d x EF x CF _{kg/mg}) / (AT _c x BW)	Excess Cancer Risk (CR) CR = LADD x SFd

Abbreviations:

cm² = centimeter squared
 kg = kilograms
 kg/mg = kilograms per milligram
 mg/cm²-d = milligrams per centimeter squared per day
 mg/kg = milligrams per kilogram
 mg/kg-d = milligrams per kilogram per day
 NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Soil-to-Skin Adherence Factor	SAF	Table C-2	mg/cm ² -d
Surface Area	SA	Table C-2	cm ²

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b Dermal Exposure from DTSC, 2015, Department of Toxic Substances Control, Preliminary Endangerment Assessment Guidance Manual, Table 1: Screening Level Dermal Absorption Fractions from Soil. January 1994 (Revised October 2015).
^c From Table C-3.
^d The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Table C-10
Inhalation of Fugitive Dust - Site Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Averaged Air Concentration	Inhalation Chronic Reference Concentration ^b	Hazard Quotient	Lifetime Air Concentration	Inhalation Unit Risk Factor ^b	Incremental Cancer Risk
	Cs	AAC	RfC	HQ	LAC	IUR	CR
	(mg/kg)	(µg/m ³)	(µg/m ³)	(unitless)	(µg/m ³)	(µg/m ³) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	7.6E-06	NA	NA	2.7E-06	6.9E-05	1.9E-10
4,4'-DDE (DDE)	0.646	1.1E-04	NA	NA	3.8E-05	9.7E-05	3.7E-09
4,4'-DDT (DDT)	0.358	5.9E-05	4.0E-01	1.5E-04	2.1E-05	9.7E-05	2.0E-09
alpha Chlordane	0.00901	1.5E-06	7.0E-01	2.1E-06	5.3E-07	3.4E-04	1.8E-10
gamma Chlordane	0.0115	1.9E-06	7.0E-01	2.7E-06	6.8E-07	3.4E-04	2.3E-10
Dieldrin	0.0242	4.0E-06	NA	NA	1.4E-06	4.6E-03	6.5E-09
Endrin	0.0858	1.4E-05	2.0E-01	7.1E-05	5.0E-06	NA	NA
Methoxychlor	0.231	3.8E-05	1.0E-02	3.8E-03	1.4E-05	NA	NA
Toxaphene	2.51	4.1E-04	NA	NA	1.5E-04	3.4E-04	5.0E-08
Total Noncancer Hazard Index ^c =				4.E-03	Total Lifetime Cancer Risk ^c =		6.E-08

Equations	
Noncancer	
Annual Air Concentration (AAC)	Hazard Quotient (HQ)
$AAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_{nc} \times CF_{hr/d})$	$HQ = AAC / RfC$
Cancer	
Lifetime Air Concentration (LAC)	Excess Cancer Risk (CR)
$LAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_c \times CF_{hr/d})$	$CR = LAC \times IUR$

Abbreviations:

kg = kilograms
m³/kg = cubic meter per kilogram
mg/kg = milligrams per kilogram
NA = Not Applicable or Not Available
µg/m³ = micrograms per cubic meter
µg/mg = micrograms per milligrams

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b From Table C-3.
^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Conversion Factor	CF _{hr/d}	24	hours/day
Conversion Factor	CF _{µg/mg}	1000	µg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Exposure Time	ET	Table C-2	hours/day
Particulate Emission Factor	PEF	Table C-4	m ³ /kg

**Table C-11
Incidental Ingestion of Soil - Student
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California**

Constituents	Exposure Point Concentration in Soil ^a	Average Daily Dose	Oral Chronic Reference Dose ^b	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^b	Incremental Cancer Risk
	Cs	ADD	RfDo	HQ	LDD	SFo	CR
	(mg/kg)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	4.7E-08	NA	NA	6.0E-09	2.4E-01	1.4E-09
4,4'-DDE (DDE)	0.646	6.6E-07	NA	NA	8.4E-08	3.4E-01	2.9E-08
4,4'-DDT (DDT)	0.358	3.6E-07	5.0E-04	7.3E-04	4.7E-08	3.4E-01	1.6E-08
alpha Chlordane	0.00901	9.1E-09	3.3E-05	2.8E-04	1.2E-09	1.3E+00	1.5E-09
gamma Chlordane	0.0115	1.2E-08	3.3E-05	3.5E-04	1.5E-09	1.3E+00	1.9E-09
Dieldrin	0.0242	2.5E-08	5.0E-05	4.9E-04	3.2E-09	1.6E+01	5.1E-08
Endrin	0.0858	8.7E-08	3.0E-04	2.9E-04	1.1E-08	NA	NA
Methoxychlor	0.231	2.3E-07	2.0E-05	1.2E-02	3.0E-08	NA	NA
Toxaphene	2.51	2.5E-06	NA	NA	3.3E-07	1.2E+00	3.9E-07
Total Noncancer Hazard Index ^c =				0.014	Total Lifetime Cancer Risk ^c =		4.9E-07

Equations	
Noncancer Average Daily Dose (ADD) $ADD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_{nc} \times BW)$	Hazard Quotient (HQ) $HQ = AADD / RfDo$
Cancer Lifetime Daily Dose (LDD) $LDD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_c \times BW)$	Excess Cancer Risk (CR) $CR = LADD \times SFo$

Abbreviations:

kg = kilograms
 kg/mg = kilograms per milligram
 mg/day = milligrams per day
 mg/kg = milligrams per kilogram
 mg/kg-d = milligrams per kilogram per day
 NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Fraction Ingested from Source	FI	1	unitless
Ingestion Rate	IngR	Table C-2	mg/day

Footnotes:

^a From Table C-1, maximum concentration of constituent detected in soil

^b From Table C-6.

^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Table C-12
Dermal Contact with Soil - Student
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Dermal Absorption Fraction from Soil ^b	Average Daily Dose	Dermal Chronic Reference Dose ^c	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^c	Incremental Cancer Risk
	Cs	ABS _d	ADD	RfDd	HQ	LDD	SFo	CR
	(mg/kg)	(unitless)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides								
4,4'-DDD (DDD)	0.0461	0.05	1.9E-08	NA	NA	2.4E-09	2.4E-01	5.8E-10
4,4'-DDE (DDE)	0.646	0.05	2.6E-07	NA	NA	3.4E-08	3.4E-01	1.2E-08
4,4'-DDT (DDT)	0.358	0.05	1.5E-07	5.0E-04	2.9E-04	1.9E-08	3.4E-01	6.4E-09
alpha Chlordane	0.00901	0.05	3.7E-09	3.3E-05	1.1E-04	4.7E-10	1.3E+00	6.2E-10
gamma Chlordane	0.0115	0.05	4.7E-09	3.3E-05	1.4E-04	6.0E-10	1.3E+00	7.9E-10
Dieldrin	0.0242	0.05	9.9E-09	5.0E-05	2.0E-04	1.3E-09	1.6E+01	2.0E-08
Endrin	0.0858	0.05	3.5E-08	3.0E-04	1.2E-04	4.5E-09	NA	NA
Methoxychlor	0.231	0.05	9.4E-08	2.0E-05	4.7E-03	1.2E-08	NA	NA
Toxaphene	2.51	0.05	1.0E-06	NA	NA	1.3E-07	1.2E+00	1.6E-07
Total Noncancer Hazard Index ^d =					0.006	Total Lifetime Cancer Risk ^d =		2.0E-07

Equations	
Noncancer	
Average Daily Dose (ADD)	Hazard Quotient (HQ)
$ADD = (Cs \times SA \times SAF \times ABS_d \times EF \times ED \times CF_{kg/mg}) / (AT_{nc} \times BW)$	$HQ = ADD / RfDd$
Cancer	
Lifetime Daily Dose (LDD)	Excess Cancer Risk (CR)
$LDD = (Cs \times ED \times SA \times SAF \times ABS_d \times EF \times CF_{kg/mg}) / (AT_c \times BW)$	$CR = LADD \times SFd$

Abbreviations:

cm² = centimeter squared
kg = kilograms
kg/mg = kilograms per milligram
mg/cm²-d = milligrams per centimeter squared per day
mg/kg = milligrams per kilogram
mg/kg-d = milligrams per kilogram per day
NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Soil-to-Skin Adherence Factor	SAF	Table C-2	mg/cm ² -d
Surface Area	SA	Table C-2	cm ²

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b Dermal Exposure from DTSC, 2015, Department of Toxic Substances Control, Preliminary Endangerment Assessment Guidance Manual, Table 1: Screening Level Dermal Absorption Fractions from Soil. January 1994 (Revised October 2015).
^c From Table C-3.
^d The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Table C-13
Inhalation of Fugitive Dust - Student
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Averaged Air Concentration	Inhalation Chronic Reference Concentration ^b	Hazard Quotient	Lifetime Air Concentration	Inhalation Unit Risk Factor ^b	Incremental Cancer Risk
	Cs	AAC	RfC	HQ	LAC	IUR	CR
	(mg/kg)	(µg/m ³)	(µg/m ³)	(unitless)	(µg/m ³)	(µg/m ³) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	7.6E-06	NA	NA	2.7E-06	6.9E-05	1.9E-10
4,4'-DDE (DDE)	0.646	1.1E-04	NA	NA	3.8E-05	9.7E-05	3.7E-09
4,4'-DDT (DDT)	0.358	5.9E-05	4.0E-01	1.5E-04	2.1E-05	9.7E-05	2.0E-09
alpha Chlordane	0.00901	1.5E-06	7.0E-01	2.1E-06	5.3E-07	3.4E-04	1.8E-10
gamma Chlordane	0.0115	1.9E-06	7.0E-01	2.7E-06	6.8E-07	3.4E-04	2.3E-10
Dieldrin	0.0242	4.0E-06	NA	NA	1.4E-06	4.6E-03	6.5E-09
Endrin	0.0858	1.4E-05	2.0E-01	7.1E-05	5.0E-06	NA	NA
Methoxychlor	0.231	3.8E-05	1.0E-02	3.8E-03	1.4E-05	NA	NA
Toxaphene	2.51	4.1E-04	NA	NA	1.5E-04	3.4E-04	5.0E-08
Total Noncancer Hazard Index ^c =				4.E-03	Total Lifetime Cancer Risk ^c =		6.E-08

Equations	
Noncancer Annual Air Concentration (AAC) $AAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_{nc} \times CF_{hr/d})$	Hazard Quotient (HQ) $HQ = AAC / RfC$
Cancer Lifetime Air Concentration (LAC) $LAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_c \times CF_{hr/d})$	Excess Cancer Risk (CR) $CR = LAC \times IUR$

Abbreviations:

kg = kilograms
m³/kg = cubic meter per kilogram
mg/kg = milligrams per kilogram
NA = Not Applicable or Not Available
µg/m³ = micrograms per cubic meter
µg/mg = micrograms per milligrams

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b From Table C-3.
^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Conversion Factor	CF _{hr/d}	24	hours/day
Conversion Factor	CF _{µg/mg}	1000	µg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Exposure Time	ET	Table C-2	hours/day
Particulate Emission Factor	PEF	Table C-4	m ³ /kg

Table C-14
Incidental Ingestion of Soil - Construction Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Average Daily Dose	Oral Chronic Reference Dose ^b	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^b	Incremental Cancer Risk
	Cs	ADD	RfDo	HQ	LDD	SFo	CR
	(mg/kg)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	1.3E-07	NA	NA	1.9E-09	2.4E-01	4.5E-10
4,4'-DDE (DDE)	0.646	1.8E-06	NA	NA	2.6E-08	3.4E-01	8.9E-09
4,4'-DDT (DDT)	0.358	1.0E-06	5.0E-04	2.0E-03	1.4E-08	3.4E-01	4.9E-09
alpha Chlordane	0.00901	2.5E-08	3.3E-05	7.7E-04	3.6E-10	1.3E+00	4.7E-10
gamma Chlordane	0.0115	3.2E-08	3.3E-05	9.8E-04	4.6E-10	1.3E+00	6.0E-10
Dieldrin	0.0242	6.8E-08	5.0E-05	1.4E-03	9.8E-10	1.6E+01	1.6E-08
Endrin	0.0858	2.4E-07	3.0E-04	8.1E-04	3.5E-09	NA	NA
Methoxychlor	0.231	6.5E-07	2.0E-05	3.3E-02	9.3E-09	NA	NA
Toxaphene	2.51	7.1E-06	NA	NA	1.0E-07	1.2E+00	1.2E-07
Total Noncancer Hazard Index ^c =				0.039	Total Lifetime Cancer Risk ^c =		1.5E-07

Equations	
Noncancer	
Average Daily Dose (ADD)	Hazard Quotient (HQ)
$ADD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_{nc} \times BW)$	$HQ = AADD / RfDo$
Cancer	
Lifetime Daily Dose (LDD)	Excess Cancer Risk (CR)
$LDD = (Cs \times IngR \times EF \times ED \times FI \times CF_{kg/mg}) / (AT_c \times BW)$	$CR = LADD \times SFo$

Abbreviations:

kg = kilograms
kg/mg = kilograms per milligram
mg/day = milligrams per day
mg/kg = milligrams per kilogram
mg/kg-d = milligrams per kilogram per day
NA = Not Applicable or Not Available

Footnotes:

^a From Table C-1, maximum concentration of constituent detected in soil

^b From Table C-3.

^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Fraction Ingested from Source	FI	1	unitless
Ingestion Rate	IngR	Table C-2	mg/day

Table C-15
Dermal Contact with Soil - Construction Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Dermal Absorption Fraction from Soil ^b	Average Daily Dose	Dermal Chronic Reference Dose ^c	Hazard Quotient	Lifetime Daily Dose	Oral Slope Factor ^c	Incremental Cancer Risk
	Cs	ABS _d	ADD	RfDd	HQ	LDD	SFo	CR
	(mg/kg)	(unitless)	(mg/kg-d)	(mg/kg-d)	(unitless)	(mg/kg-d)	(mg/kg-d) ⁻¹	(unitless)
Organochlorine Pesticides								
4,4'-DDD (DDD)	0.0461	0.05	9.5E-08	NA	NA	1.4E-09	2.4E-01	3.3E-10
4,4'-DDE (DDE)	0.646	0.05	1.3E-06	NA	NA	1.9E-08	3.4E-01	6.5E-09
4,4'-DDT (DDT)	0.358	0.05	7.4E-07	5.0E-04	1.5E-03	1.1E-08	3.4E-01	3.6E-09
alpha Chlordane	0.00901	0.05	1.9E-08	3.3E-05	5.6E-04	2.7E-10	1.3E+00	3.5E-10
gamma Chlordane	0.0115	0.05	2.4E-08	3.3E-05	7.2E-04	3.4E-10	1.3E+00	4.4E-10
Dieldrin	0.0242	0.05	5.0E-08	5.0E-05	1.0E-03	7.1E-10	1.6E+01	1.1E-08
Endrin	0.0858	0.05	1.8E-07	3.0E-04	5.9E-04	2.5E-09	NA	NA
Methoxychlor	0.231	0.05	4.8E-07	2.0E-05	2.4E-02	6.8E-09	NA	NA
Toxaphene	2.51	0.05	5.2E-06	NA	NA	7.4E-08	1.2E+00	8.9E-08
Total Noncancer Hazard Index ^d =					0.028	Total Lifetime Cancer Risk ^d =		1.E-07

Equations	
Noncancer Average Daily Dose (ADD) $ADD = (Cs \times SA \times SAF \times ABS_d \times EF \times ED \times CF_{kg/mg}) / (AT_{nc} \times BW)$	Hazard Quotient (HQ) $HQ = ADD / RfDd$
Cancer Lifetime Daily Dose (LDD) $LDD = (Cs \times ED \times SA \times SAF \times ABS_d \times EF \times CF_{kg/mg}) / (AT_c \times BW)$	Excess Cancer Risk (CR) $CR = LDD \times SFd$

Abbreviations:

cm² = centimeter squared
kg = kilograms
kg/mg = kilograms per milligram
mg/cm²-d = milligrams per centimeter squared per day
mg/kg = milligrams per kilogram
mg/kg-d = milligrams per kilogram per day
NA = Not Applicable or Not Available

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Body Weight	BW	Table C-2	kg
Conversion Factor	CF _{kg/mg}	0.000001	kg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Soil-to-Skin Adherence Factor	SAF	Table C-2	mg/cm ² -d
Surface Area	SA	Table C-2	cm ²

Footnotes:

- ^a From Table C-1, maximum concentration of constituent detected in soil
^b Dermal Exposure from DTSC, 2015, Department of Toxic Substances Control, Preliminary Endangerment Assessment Guidance Manual, Table 1: Screening Level Dermal Absorption Fractions from Soil. January 1994 (Revised October 2015).
^c From Table C-3.
^d The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Table C-16
Inhalation of Fugitive Dust - Construction Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Exposure Point Concentration in Soil ^a	Averaged Air Concentration	Inhalation Chronic Reference Concentration ^b	Hazard Quotient	Lifetime Air Concentration	Inhalation Unit Risk Factor ^b	Incremental Cancer Risk
	Cs	AAC	RfC	HQ	LAC	IUR	CR
	(mg/kg)	(µg/m ³)	(µg/m ³)	(unitless)	(µg/m ³)	(µg/m ³) ⁻¹	(unitless)
Organochlorine Pesticides							
4,4'-DDD (DDD)	0.0461	1.1E-05	NA	NA	1.5E-07	6.9E-05	1.0E-11
4,4'-DDE (DDE)	0.646	1.5E-04	NA	NA	2.1E-06	9.7E-05	2.0E-10
4,4'-DDT (DDT)	0.358	8.2E-05	4.0E-01	2.0E-04	1.2E-06	9.7E-05	1.1E-10
alpha Chlordane	0.00901	2.1E-06	7.0E-01	2.9E-06	2.9E-08	3.4E-04	1.0E-11
gamma Chlordane	0.0115	2.6E-06	7.0E-01	3.8E-06	3.8E-08	3.4E-04	1.3E-11
Dieldrin	0.0242	5.5E-06	NA	NA	7.9E-08	4.6E-03	3.6E-10
Endrin	0.0858	2.0E-05	2.0E-01	9.8E-05	2.8E-07	NA	NA
Methoxychlor	0.231	5.3E-05	1.0E-02	5.3E-03	7.5E-07	NA	NA
Toxaphene	2.51	5.7E-04	NA	NA	8.2E-06	3.4E-04	2.8E-09
Total Noncancer Hazard Index ^c =				6.E-03	Total Lifetime Cancer Risk ^c =		3.5E-09

Equations	
Noncancer	
Averaged Air Concentration (AAC)	Hazard Quotient (HQ)
$AAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_{nc} \times CF_{hr/d})$	$HQ = AAC / RfC$
Cancer	
Lifetime Air Concentration (LAC)	Excess Cancer Risk (CR)
$LAC = ((Cs/PEF) \times ET \times EF \times ED \times CF_{\mu g/mg}) / (AT_c \times CF_{hr/d})$	$CR = LAC \times IUR$

Abbreviations:

kg = kilograms
m³/kg = cubic meter per kilogram
mg/kg = milligrams per kilogram
NA = Not Applicable or Not Available
µg/m³ = micrograms per cubic meter
µg/mg = micrograms per milligrams

Parameter	Symbol	Value	Units
Averaging Time - Cancer	AT _c	Table C-2	days
Averaging Time - Noncancer	AT _{nc}	Table C-2	days
Conversion Factor	CF _{hr/d}	24	hours/day
Conversion Factor	CF _{µg/mg}	1000	µg/mg
Exposure Duration	ED	Table C-2	years
Exposure Frequency	EF	Table C-2	days/year
Exposure Time	ET	Table C-2	hours/day
Particulate Emission Factor	PEF	Table C-4	m ³ /kg

Footnotes:

^a From Table C-1, maximum concentration of constituent detected in soil

^b From Table C-3.

^c The total noncancer hazard index is the sum of the chemical-specific noncancer hazard and and the total lifetime cancer risk is the sum of the cancer risks.

Table C-17
Summary of Noncancer Hazards for Residential Receptors
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Hazard Index
Organochlorine Pesticides				
4,4'-DDD (DDD)	NA	NA	NA	NA
4,4'-DDE (DDE)	NA	NA	NA	NA
4,4'-DDT (DDT)	9.2E-03	1.3E-03	8.6E-04	0.011
alpha Chlordane	3.5E-03	5.1E-04	1.2E-05	0.0040
gamma Chlordane	4.5E-03	6.5E-04	1.6E-05	0.0051
Dieldrin	6.2E-03	9.0E-04	NA	0.0071
Endrin	3.7E-03	5.3E-04	4.1E-04	0.0046
Methoxychlor	1.5E-01	2.1E-02	2.2E-02	0.19
Toxaphene	NA	NA	NA	NA
Total Noncancer Hazard Index ^[1]	0.17	0.025	2.E-02	0.22
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative Hazard Index based on the sum of all exposure pathways. All hazard indices based on maximum detected concentrations of constituents in soil</p>				

Table C-18
Summary of Cancer Risks for Residential Receptors
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Cancer Risk
Organochlorine Pesticides				
4,4'-DDD (DDD)	1.6E-08	2.6E-09	1.1E-09	2.0E-08
4,4'-DDE (DDE)	3.2E-07	5.1E-08	2.2E-08	3.9E-07
4,4'-DDT (DDT)	1.8E-07	2.8E-08	1.2E-08	2.2E-07
alpha Chlordane	1.7E-08	2.7E-09	1.1E-09	2.1E-08
gamma Chlordane	2.2E-08	3.5E-09	1.4E-09	2.6E-08
Dieldrin	5.6E-07	9.0E-08	4.0E-08	6.9E-07
Endrin	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA
Toxaphene	4.3E-06	7.0E-07	3.0E-07	5.3E-06
Total Cancer Risk ^[1]	5.4E-06	8.7E-07	3.8E-07	6.7E-06
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative cancer risk based on the sum of all exposure pathways. All risk estimates based on maximum detected concentrations of constituents in soil</p>				

Table C-19
Summary of Noncancer Hazards for Site Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Hazard Index
Organochlorine Pesticides				
4,4'-DDD (DDD)	NA	NA	NA	NA
4,4'-DDE (DDE)	NA	NA	NA	NA
4,4'-DDT (DDT)	4.4E-04	2.7E-04	1.5E-04	0.0009
alpha Chlordane	1.7E-04	1.0E-04	2.1E-06	0.00027
gamma Chlordane	2.1E-04	1.3E-04	2.7E-06	0.00035
Dieldrin	3.0E-04	1.8E-04	NA	0.00048
Endrin	1.8E-04	1.1E-04	7.1E-05	0.00035
Methoxychlor	7.1E-03	4.3E-03	3.8E-03	0.015
Toxaphene	NA	NA	NA	NA
Total Noncancer Hazard Index ^[1]	0.008	0.0051	4.E-03	0.018
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative Hazard Index based on the sum of all exposure pathways. All hazard indices based on maximum detected concentrations of constituents in soil</p>				

Table C-20
Summary of Cancer Risks for Site Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Cancer Risk
Organochlorine Pesticides				
4,4'-DDD (DDD)	2.4E-09	1.5E-09	1.9E-10	4.1E-09
4,4'-DDE (DDE)	4.8E-08	2.9E-08	3.7E-09	8.1E-08
4,4'-DDT (DDT)	2.7E-08	1.6E-08	2.0E-09	4.5E-08
alpha Chlordane	2.6E-09	1.6E-09	1.8E-10	4.3E-09
gamma Chlordane	3.3E-09	2.0E-09	2.3E-10	5.5E-09
Dieldrin	8.5E-08	5.1E-08	6.5E-09	1.4E-07
Endrin	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA
Toxaphene	6.6E-07	4.0E-07	5.0E-08	1.1E-06
Total Cancer Risk ^[1]	8.3E-07	5.0E-07	6.3E-08	1.4E-06
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative cancer risk based on the sum of all exposure pathways. All risk estimates based on maximum detected concentrations of constituents in soil</p>				

Table C-21
Summary of Noncancer Hazards for Student
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Hazard Index
Organochlorine Pesticides				
4,4'-DDD (DDD)	NA	NA	NA	NA
4,4'-DDE (DDE)	NA	NA	NA	NA
4,4'-DDT (DDT)	7.3E-04	2.9E-04	1.5E-04	0.0012
alpha Chlordane	2.8E-04	1.1E-04	2.1E-06	0.00039
gamma Chlordane	3.5E-04	1.4E-04	2.7E-06	0.00050
Dieldrin	4.9E-04	2.0E-04	NA	0.00069
Endrin	2.9E-04	1.2E-04	7.1E-05	0.00048
Methoxychlor	1.2E-02	4.7E-03	3.8E-03	0.020
Toxaphene	NA	NA	NA	NA
Total Noncancer Hazard Index ^[1]	0.014	0.0056	4.E-03	0.023
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative Hazard Index based on the sum of all exposure pathways. All hazard indices based on maximum detected concentrations of constituents in soil</p>				

Table C-22
Summary of Cancer Risks for Student
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Cancer Risk
Organochlorine Pesticides				
4,4'-DDD (DDD)	1.4E-09	5.8E-10	1.9E-10	2.2E-09
4,4'-DDE (DDE)	2.9E-08	1.2E-08	3.7E-09	4.4E-08
4,4'-DDT (DDT)	1.6E-08	6.4E-09	2.0E-09	2.4E-08
alpha Chlordane	1.5E-09	6.2E-10	1.8E-10	2.3E-09
gamma Chlordane	1.9E-09	7.9E-10	2.3E-10	3.0E-09
Dieldrin	5.1E-08	2.0E-08	6.5E-09	7.7E-08
Endrin	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA
Toxaphene	3.9E-07	1.6E-07	5.0E-08	6.0E-07
Total Cancer Risk ^[1]	4.9E-07	2.0E-07	6.3E-08	7.5E-07
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative cancer risk based on the sum of all exposure pathways. All risk estimates based on maximum detected concentrations of constituents in soil</p>				

Table C-23
Summary of Noncancer Hazards for Construction Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Hazard Index
Organochlorine Pesticides				
4,4'-DDD (DDD)	NA	NA	NA	NA
4,4'-DDE (DDE)	NA	NA	NA	NA
4,4'-DDT (DDT)	2.E-03	1.E-03	2.E-04	0.0037
alpha Chlordane	8.E-04	6.E-04	3.E-06	0.0013
gamma Chlordane	1.E-03	7.E-04	4.E-06	0.0017
Dieldrin	1.E-03	1.E-03	NA	0.0024
Endrin	8.E-04	6.E-04	1.E-04	0.0015
Methoxychlor	3.E-02	2.E-02	5.E-03	0.062
Toxaphene	NA	NA	NA	NA
Total Noncancer Hazard Index ^[1]	0.039	0.028	6.E-03	0.072
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative Hazard Index based on the sum of all exposure pathways. All hazard indices based on maximum detected concentrations of constituents in soil</p>				

Table C-24
Summary of Cancer Risks for Construction Worker
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Constituents	Incidental Ingestion of Soil	Dermal Contact with Soil	Inhalation of Fugitive Dust	Cumulative Cancer Risk
Organochlorine Pesticides				
4,4'-DDD (DDD)	4.5E-10	3.3E-10	1.0E-11	7.8E-10
4,4'-DDE (DDE)	8.9E-09	6.5E-09	2.0E-10	1.6E-08
4,4'-DDT (DDT)	4.9E-09	3.6E-09	1.1E-10	8.6E-09
alpha Chlordane	4.7E-10	3.5E-10	1.0E-11	8.3E-10
gamma Chlordane	6.0E-10	4.4E-10	1.3E-11	1.1E-09
Dieldrin	1.6E-08	1.1E-08	3.6E-10	2.7E-08
Endrin	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA
Toxaphene	1.2E-07	8.9E-08	2.8E-09	2.1E-07
Total Cancer Risk ^[1]	1.5E-07	1.1E-07	3.5E-09	2.7E-07
<p>Abbreviations: NA = Not Applicable or Not Available ^[1] - Cumulative cancer risk based on the sum of all exposure pathways. All risk estimates based on maximum detected concentrations of constituents in soil</p>				

Table C-25
Summary of Noncancer Hazard Indices and Cancer Risks
Screening Human Health Risk Assessment
Proposed School Site at Doris Avenue and N. Patterson Road
Oxnard, California

Receptor	Hazard Index ^[1]	Lifetime Incremental Cancer Risk ^[1]
Residential	0.22	6.7E-06
Site Worker	0.018	1.4E-06
Site Student	0.023	7.5E-07
Construction Worker	0.072	2.7E-07
Notes:		
<p>^[1] - Cumulative hazard index and cancer risk based on the sum of all exposure pathways and all COPCs.</p> <p>Cumulative hazard indices and risks based on maximum detected concentrations of constituents in soil.</p>		

APPENDIX D
ECOLOGICAL SCREENING EVALUATION



Rincon Consultants, Inc.

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January 31, 2017
Project No: 17-03734

Greg Buchanan
ATC Group Services, LLC
25 Cupania Circle
Monterey Park, CA, 91755
Via email: greg.buchanan@atcassociates.com

Subject: Ecological Screening Evaluation for the New Elementary and Middle School Project,
Oxnard, Ventura County, California

Dear Mr. Buchanan:

Rincon Consultants, Inc. (Rincon) is pleased to submit this Ecological Screening Evaluation for the New Elementary and Middle School Project (Project) located in Oxnard, Ventura County, California. This evaluation was conducted in response to Department of Toxic Substances Control comments on the Draft Endangerment Assessment Workplan. Ecological exposure pathways for each chemical of potential concern occurring onsite were also evaluated.

Project Description

The project is located at the southeast corner of Doris Avenue and Patterson Road in the City of Oxnard, California (Figure 1). The project site is bordered by Doris Avenue and residential neighborhoods to the north, Patterson Road and agricultural fields to the west, and unnamed dirt roads and agricultural fields to the east and south. The project includes the development of approximately 25 acres of agricultural land (historic and current use) for new elementary and middle schools. The project site is depicted in the Township 1 North and Range 21 West of the U.S. Geological Survey (USGS) Oxnard California 7.5-minute topographic quadrangle.

Literature Review

As part of the Ecological Screening Assessment, and to characterize the existing biological resources onsite and in the immediate vicinity, current and historic aerial photographs, topographic maps, soil survey maps, geologic maps, and climatic data related to the site and vicinity were reviewed.

Rincon conducted a search and review of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDDB) and Biogeographic Information and Observation System (BIOS), as well as the USFWS Critical Habitat Portal and National Marine Fisheries Service (NMFS) designated Critical Habitat data, to determine if there were any recorded observations of special status species, habitats, or other special status biological resources within the vicinity of the project site. Other resources reviewed include the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California, CDFW Special Animals List and Special Vascular Plants, Bryophytes, and Lichens List, and USFWS National Wetlands Inventory online mapper.

ATC Group Service, LLC
New Elementary and Middle School Project



Imagery provided by ESRI and its licensors © 2016.

★ Project Location



Project Location

Figure 1

Biological Survey and Habitat Evaluation

Following the review of existing information, Rincon conducted a reconnaissance-level field survey on January 10, 2017, to identify flora and fauna within the proposed project site and to characterize the habitat present onsite. All biological resources, plant communities and habitat types within and adjacent to the project site, incidental observations of wildlife and botanical species, and other project features were recorded. Particular attention was given to identify the presence, or potential presence, of special status species as well as to identify any surface features that could transport contaminants (pathway assessment).

The identification of potentially suitable habitat for special status species was based on a suitability analysis level only and did not include definitive surveys (e.g., focused protocol-level plant or wildlife surveys) for the presence or absence of any species that may be present. The pathway assessment was based on physical transport of contaminants through any potential surface feature. A formal wetland and/or waters of the U.S. and State delineation(s) was not included as a component of the assessment.

Results

The project site is currently being used to grow cilantro (*Coriandrum sativum*) and was historically used to grow a variety of agricultural crops. Due to the current and historical agricultural land use, native plant and wildlife species occurring onsite are limited, and common species expected to occur in this type of environment were observed. No special status species or suitable habitat for special status species were observed during the survey. The site is not mapped as a wildlife corridor, nursery site, critical habitat, or wetland. Plant species observed onsite include lamb's quarters (*Chenopodium album*), sow thistle (*Sonchus oleraceus*), cheeseweed mallow (*Malva parviflora*), Shepherd's purse (*Capsella bursa-pastoris*), mustard (*Brassica* sp.), common purslane (*Portulaca oleracea*), filaree (*Erodium* sp.), cabbage (*Brassica* sp.), cilantro, nettle species, and non-native grass (*Bromus* sp.). Plant species observed, aside from the cilantro crop, are species that typically become established in disturbed/ruderal environments. These plant species were sparsely located throughout the site and did not contribute to any substantial habitat or biological value. Wildlife observed onsite and adjacent to the site include house finch (*Haemorhous mexicanus*), yellow-rumped warbler (*Setophaga coronata*), Eurasian collared dove (*Streptopelia decaocto*), American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), and California towhee (*Melospiza crissalis*). Wildlife species occurring onsite, primarily birds, were observed foraging among the cilantro plants and drinking water that originated from field irrigation. Although not observed, reptiles such as the western fence lizard (*Sceloporus occidentalis*) and mammals such as the house mouse (*Mus musculus*) may also occur onsite.

All wildlife species observed onsite are commonly observed in urban and agricultural environments and are highly mobile. Although the site provides somewhat limited foraging habitat for wildlife, it does not provide natural or sensitive wildlife habitat. Wildlife species observed will readily use adjacent lands for foraging, breeding, nesting, etc. Additionally, due to the frequent tilling of the project site for agriculture, no wildlife burrows or burrowing animals were observed. The nearest natural wildlife habitat to the project site occurs approximately 1.75 miles north in the Santa Clara River.

Ecological Pathway Assessment

A complete exposure pathway includes the following elements: source of contaminant, transport media, exposure point, exposure route, and receptor population. Undisturbed natural habitat, perennial surface water bodies, and sensitive riparian habitats do not occur onsite or adjacent to the site. Due to the lack of undisturbed natural habitat, perennial surface water bodies, and sensitive riparian habitat, sensitive

biological resources are not expected to occur. Therefore, a complete exposure pathway, via soil or surface flow, to wildlife and plant species and their habitats does not occur.

Conclusion

As previously mentioned, the project site and adjacent lands were historically used for agriculture and no sensitive biological resources are expected to occur on, or adjacent to, the site, primarily due to lack of undisturbed natural habitat. Therefore, the proposed project is not expected to result in potential contaminant exposure to wildlife, plants, or habitat.

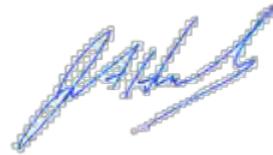
Rincon Consultants, Inc., on behalf of ATC Group Service, LLC, is committed to providing exceptional environmental consulting services for this project. Please contact us if you have any questions or need any additional information.

Sincerely,

Rincon Consultants, Inc.



James Rasico, CISEC
Associate Biologist



John Hindley, PhD
Senior Biologist



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

May 4, 2017

Ms. Lisa Cline
Deputy Superintendent
Business and Fiscal Services
1051 South A Street
Oxnard, California 93030

APPROVAL OF PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT –
PROPOSED NEW ELEMENTARY AND MIDDLE SCHOOLS, SOUTHEAST CORNER
OF DORIS AVENUE AND PATTERSON ROAD, OXNARD, CALIFORNIA 93030
(SITE CODE: 304663)

Dear Ms. Cline:

The Department of Toxic Substances Control (DTSC) reviewed the Preliminary Endangerment Assessment Report (PEA) prepared by ATC Group Services LLC on behalf of the Oxnard School District (District), dated March 29, 2017 and received electronically on April 14, 2017. The PEA was revised in response to DTSC comments on the Draft version forwarded in a letter dated March 15, 2017, and subsequent comments forwarded electronically on March 29, 2017 and April 12, 2017. The PEA includes site background information, and presents investigation results and conclusions and recommendations based on a risk screening evaluation at the proposed new elementary and middle schools site (Site).

In addition, the District notified DTSC on April 27, 2017 that it has complied with all public review and comment requirements for the PEA pursuant to Option A (Ed. Code § 17213.1, subd. (a)(6)(A)). The District made the PEA available for public review and comment from March 23 through April 24, 2017 and a public hearing was held on April 19, 2017. No public comments were received regarding the PEA.

According to the PEA, the proposed 25-acre school site, depicted on the figure enclosed herein, is located at the southeast corner of Doris Avenue and Patterson Road in the City of Oxnard, California. According to the Phase I Environmental Site Assessment, the area was used for agriculture from 1940 to present. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, which received regulatory closure in 1998. A plugged and inactive oil well is located approximately 475 feet south of the Site. The Site is bordered by residential

Ms. Lisa Cline
May 4, 2017
Page 2

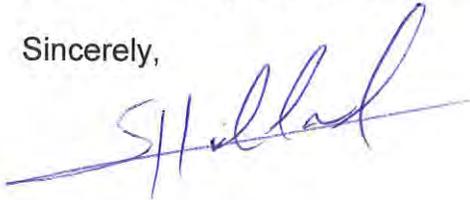
development on the north, and agricultural land on the east, west, and north. To evaluate the impact from residual agricultural chemicals and the off-site oil well, the Site was investigated for organochlorine pesticides (OCPs) and metals in soil, and methane and hydrogen sulfide in soil gas.

Based on information presented in the PEA, Toxaphene was the only constituent detected at concentrations in excess of the risk screening levels. Risk screening evaluation using school based scenario indicate that the Site does not pose a significant risk to students and staff, and is suitable for use as a school. Risk screening using residential based scenario indicate potential risk to future residents. The PEA Report recommends land use covenant (LUC) to limit the Site's future use to non-residential purposes, along with a soil management plan (SMP).

Based on review of the PEA, a release or threatened release of hazardous material or the presence of a naturally occurring hazardous material, which would pose a threat to public health or the environment under school land use, was not indicated at the Site. Therefore, DTSC concurs with the conclusion of the PEA that a LUC for the Site is required and hereby approves the PEA.

If you have any questions regarding this project, please contact Xihong Scarlett Zhai, Project Manager, at (714) 484-5316 or by e-mail at Xihong.Zhai@dtsc.ca.gov, or contact me at (714) 484-5368 or by e-mail at Shahir.Haddad@dtsc.ca.gov.

Sincerely,



Shahir Haddad, P.E.
Supervising Engineer
Brownfields Restoration and School Evaluation Branch
Brownfields and Environmental Restoration Program

kl/xsz/sh

Enclosure

cc: See next page

Ms. Lisa Cline
May 4, 2017
Page 3

cc: (via e-mail)

Mr. Ben Chevlen, P.G.
Program Manager
ATC Group Services LLC
Ben.Chevlen@atcassociates.com

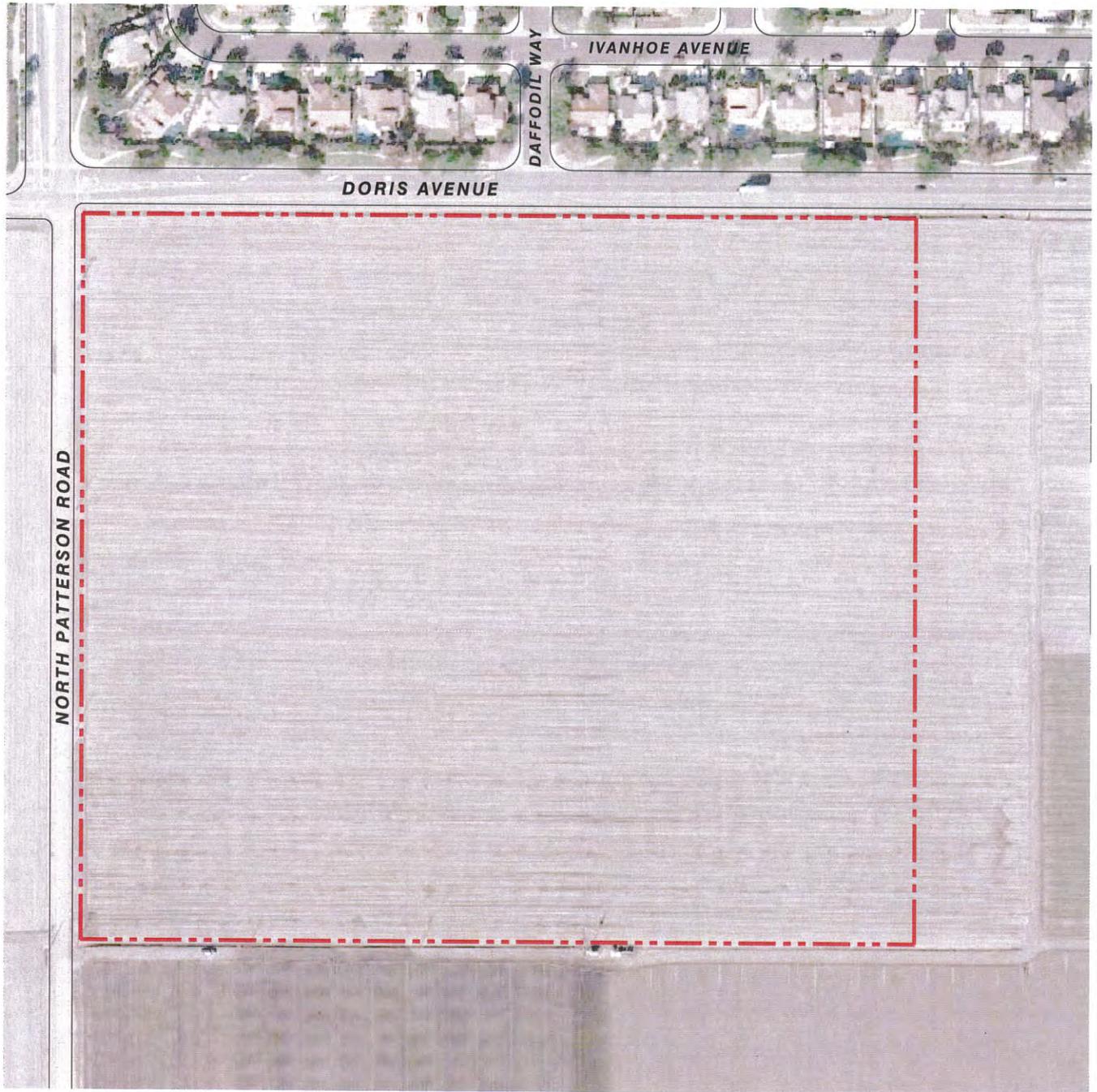
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Brownfields Restoration and School Evaluation Branch Reading File



LEGEND

--- SITE BOUNDARY



0 200
 Approximate Scale in Feet

SCALE: 1" = 200'

SITE PLAN
 DORIS AVENUE AND NORTH PATTERSON ROAD
 OXNARD, CALIFORNIA

PROJECT NUMBER: 1011600826	PHASE: 1	FIGURE
REVIEW BY: G. BUCHANAN	DRAWN BY: DAW	1

ATC 25 Cupania Circle
 Monterey Park, CA 91755
 Ph: (323) 517-9780 *** Fax: (323) 517-9781

May 17, 2017

Oxnard School District
1051 South A Street
Oxnard, CA 93030

SUBJECT **Soil Management Plan**
Proposed Elementary and Middle Schools
Southeast Corner of Doris Avenue and North Patterson Road
Oxnard, California
ATC Project No. 1011600893

To whom it may concern,

As recommended in ATC Group Services LLC's (ATC's) *Preliminary Endangerment Assessment (PEA) Report*, dated March 29, 2017, ATC has prepared this Soil Management Plan (SMP) to attempt to mitigate potential risks to human health and the environment in the event of future construction and/or land improvement activities at the site. Shallow soil beneath the site has been shown to contain residual concentrations of pesticides which are believed to have originated during historical agricultural usage of the site. The Department of Toxic Substances Control (DTSC) has determined that adherence to this SMP and the completion of a Land Use Covenant Agreement restricting usage of the site to non-residential purposes are satisfactory to mitigate potential hazards associated with residual pesticide concentrations at the site.

OBJECTIVE

The primary objective of this SMP is to provide protocols for the management of soil potentially contaminated with residual amounts of pesticides at the site, as shown on **Figure 1**. This SMP is a tool for contractors to utilize when performing activities that intrude into the soil at the site, such as excavation, grading, and utility installation. This SMP provides guidance regarding how to handle contaminated soil that may be encountered, as well as how to identify, sample, and properly dispose of contaminated soil within the project area, and what personal protective equipment (PPE) is appropriate for site workers coming into contact with potentially contaminated soil.

BACKGROUND

The property located at the southeast corner of Doris Avenue and Patterson Road consists of a rectangular-shaped, 25-acre parcel of land, which is currently utilized as an agricultural field. The Oxnard School District (OSD) is planning to develop the site into elementary and middle schools. This Preliminary Endangerment Assessment (PEA) report was prepared for the site as required by the Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup Division.

The site is currently an actively farmed agricultural field. Cardno ATC (now ATC) prepared a *Phase I Environmental Site Assessment (ESA)* report for the site, dated March 5, 2014. In the report, ATC identified historical usage of the site for agricultural purposes from at least 1940 to the present. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, where a 550-gallon and a 3,000-gallon gasoline-containing underground storage tank (UST) were present. The site received regulatory closure in 1998. The Phase I report concluded that the LUST site does not represent a *Recognized Environmental Condition (REC)* to the subject property. No other onsite or offsite RECs were reported in the Phase I ESA.

In December of 2016, ATC advanced soil borings SB-1 through SB-36 to 2.5 feet below ground surface (bgs) in a grid pattern across the site. Soil samples were collected using a hand auger, and stored in eight-ounce jars.

The 36 soil samples collected from 0 to 0.5 feet bgs for OCP analysis (EPA Method 8081A) were combined in the laboratory from four adjacent soil samples, for a total of nine composite samples and one duplicate sample. The 36 soil samples collected from 2 to 2.5 feet bgs were placed on hold in the laboratory pending analysis of the surface samples. Toxaphene was the only pesticide compound that exceeded its Regional Screening Level (RSL) for residential properties. Due to detection of various OCPs in the 0 to 0.5-foot composite samples, the two-foot composite samples were also analyzed. Toxaphene was detected at lower concentrations in the two-foot samples compared to the 0.5-foot samples.

Nine discrete non-contiguous soil samples and one duplicate were analyzed for arsenic using EPA Method 6010B. The soil samples exceeded the Regional Screening Level (RSL) for residential properties. However, arsenic results did not exceed the DTSC-suggested background screening level of 12 milligrams per kilogram (mg/kg).

Soil vapor samples were collected from ten direct-push boring locations at five and 10 feet bgs, respectively. Samples were collected following applicable DTSC and Regional Water Quality Control Board (RWQCB) protocols for soil vapor surveys. The vapor samples were analyzed for methane using EPA Method 8015M. A maximum of 15.26 parts per million by volume (ppmv) was detected near the northeastern corner of the site. This is equivalent to approximately 0.03 percent of the Lower Explosive Limit (LEL), and is not considered to be a hazard to the site.

Each vapor sample was tested for hydrogen sulfide using a hand-held field instrument. No hydrogen sulfide was detected in soil gas at the site.

A Human Health Screening Evaluation was performed using soil sample results from the December 2016 site assessment. The assessment evaluated potential soil exposures associated with four potential receptors, including the hypothetical future resident, future site worker, future site student, and construction worker. Estimated upper-bound hazard indices ranged from 0.014 for the site worker scenario to 0.2 for the residential scenario. The results of the risk assessment indicated that the presence of OCPs in soil is not expected to result in adverse, non-cancer health impacts to any of the potential receptors evaluated.

Estimates of potential cumulative upper-bound lifetime incremental cancer risks ranged from 6.3×10^{-6} for the hypothetical future resident to 2.6×10^{-7} for the construction worker scenarios. Upper-bound lifetime incremental cancer risk estimates for the school site receptors ranged from 1.3×10^{-6} to 6.9×10^{-7} for the site worker and student, respectively. The lifetime incremental cancer risk estimate for the hypothetical residential receptor exceeds the point of departure of 1×10^{-6} typically utilized by DTSC to determine whether a removal action is warranted to protect human health for unrestricted land uses. The lifetime incremental cancer risk estimates for the site worker, site student, and construction worker are consistent with or below the 1×10^{-6} point of departure. Based on the results of the risk, the concentrations of OCPs, including toxaphene detected in soil samples collected during this investigation do not present a significant risk to future site workers, students or construction workers. Consequently, no additional mitigation or risk management measures would be warranted for the proposed development and use of the property as a school site.

In general, the vertical extent of toxaphene in soil appears to be limited to the first few feet below ground surface. The limited vertical extent of toxaphene is consistent with the historical application of this now banned pesticide.

SOIL MANAGEMENT PLAN

Health and Safety

Contractors performing invasive activities at the site (ex. excavation, grading, and trenching) will be required to utilize a site-specific health and safety plan (HASP) that will address individual tasks and chemical exposure scenarios as they relate to soil management practices and any planned construction and land development activities. All individuals working within close proximity of disturbed soil will be required to read and sign the HASP to acknowledge their understanding of the information. The HASP will describe hazardous conditions that may be encountered, and will prescribe the necessary safety protocols to protect employees from these hazards. The HASP will be reviewed by the project management team and then reviewed and approved for field use by the site health and safety officer or site supervisor. The HASP will be implemented and enforced by the assigned site health and safety officer or site supervisor, as appropriate.

A generalized HASP for the site has been prepared by ATC and is included as **Attachment 1**; however, all contractors will be required to prepare task-specific Job Hazard Analyses (JHAs) for the tasks they are going to perform (blank JHA forms are included in the HASP).

Soil Management

Based on data collected to-date, residual pesticides in site soil are widespread and do not exhibit point-source contamination profiles (i.e. they appear to have originated from the application of pesticides, not leaking containers or intentional dumping of pesticides at the site). ATC recommends that the proposed school site be designed to further minimize the potential for direct contact with OCP impacted soil. Representative measures may include, but are not necessarily limited to, import of clean, documented fill material for use in planters, playgrounds, and playing fields within the first foot of ground surface, and removing topsoil from planned playfield areas for use beneath asphalt-covered areas. These additional measures would serve to further reduce and/or eliminate exposures to residual OCPs in soil.

Dust suppression may be necessary to reduce the spread of airborne soil particles that may contain adsorbed-phase contaminants. Whenever site soil is being removed from the work area and/or moved with heavy equipment, that soil shall be lightly sprayed with water to minimize dust. Any dirt tracked off-site due to on-site construction activities being performed at the site shall be swept up daily. Any soil stockpiles segregated on the basis of confirmed or suspected soil contamination shall be lightly sprayed with water to minimize dust, and covered with tarps or other effective covers overnight.

Equipment decontamination can be completed by scraping excess soil from larger heavy equipment such as front end loaders and backhoe buckets. All recovered soils should be temporarily stockpiled on-site for laboratory analysis and possible off-site disposal. Smaller hand-held equipment can be decontaminated by pressure washing and/or scrubbing with an Alconox® soap solution (or equivalent) and rinsed with clean potable water. Equipment decontamination should be performed in a designated portion of the site, preferably on plastic sheeting.

The first two feet of topsoil should be excavated and temporarily stockpiled on-site for sampling and laboratory analysis. All stockpiled soils will be covered daily with plastic sheeting. A four-point composite sample shall be collected from each stockpile at different locations and depths for each 1,000 cubic yards (or fraction thereof) of soil generated. The individual soil samples will be retained pending analysis of the composite samples. The composite sample will be analyzed for OCPs by EPA Method 8081A (or equivalent). The laboratory results shall be compared to the most recent updated version of EPA's and DTSC's screening levels divided by four. If the "adjusted" screening level is exceeded, then the individual point soil sample results will be compared to the "un-adjusted" screening level to determine if the suspect soil should be removed from the site.

In the event that contaminated soil is encountered (defined as having one or more analytes present at concentrations exceeding their respective screening levels), the DTSC shall be contacted prior to the soil being removed from the site. Additionally, prior to the contaminated soil being removed from the site, the contractor performing the work shall obtain a waste acceptance letter from the intended disposal facility (including, but not limited to additional soil analyses or sampling frequency, as required by the disposal facility), and verify that the facility is authorized to accept the profiled waste. Excavated contaminated soil shall not be reworked into site soils, or used as backfill materials in any site excavations. DTSC notification is not required for the on-site reworking or off-site disposal of soil not found to be contaminated. Soil stockpiled for off-site disposal should not remain on-site for more than 90 days.

In the event that off-site soil disposal activities necessitate the importation of fill soil, the contractor shall follow the guidance presented in the DTSC's *Information Advisory Clean Imported Fill*, dated October 2001 (or any updated version as appropriate). A copy of the most-current version of the DTSC advisory is available online at:

https://www.dtsc.ca.gov/Schools/upload/SMP_FS_Cleanfill-Schools.pdf

Soil Analysis and Disposal

Prior to removing any soil from the site for disposal, soil samples for waste profiling purposes shall be submitted under chain-of-custody to a California State-certified analytical laboratory. The waste profile samples will be analyzed for OCPs by EPA Method 8081A (or equivalent). Stockpiled soil shall not be disposed of until the laboratory results are received and provided to the intended landfill for profiling purposes.

Regulations have been established by the EPA and DTSC to protect human health and the environment that include the known contaminants of potential concern detected in soil at the site. Analytical results should be compared to the most recent updated versions of the EPA's and DTSC's screening levels, as appropriate. In the event that both the EPA and DTSC have established screening levels for a given constituent, the most-conservative value shall be utilized. The most-current EPA screening levels are available on-line at:

<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016>

The most-current DTSC screening levels are available on-line at:

https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA_Note_3_-2016-06.pdf

Reporting

In the event that contaminated soil is encountered, a summary report will be prepared by the contractor and/or environmental consultant that will include a description of field activities performed, a copy of the laboratory analytical report, a diagram showing where the contaminated soils originated, and disposal documentation. The summary report will include comparisons of laboratory analytical results to the then-current EPA and/or DTSC screening levels.

Reports will be submitted to DTSC within 60 days following the completion of field activities. The property owner shall maintain copies (either electronic or physical) of all submitted reports for a minimum of ten years past their date of issue, and shall make those reports available to any prospective buyers of the property within that time frame.

Miscellaneous

If the expected scope of work will require a storm water pollution prevention plan (SWPPP), excavation and shoring plan, and/or a spill contingency plan (or any similar documents), those document(s) will be prepared by a qualified individual prior to commencing with the construction activities.

CLOSING

This Soil Management Plan has been prepared for Oxnard School District for the above subject location. ATC provided these services consistent with the level and skill ordinarily exercised by members of the profession currently practicing under similar conditions. Should you have any questions or require additional information regarding this Soil Management Plan, please contact the undersigned.

Sincerely,

ATC Group Services LLC



Greg Buchanan, P.G.
Senior Project Manager
Direct Line +1 323 517 9680
Email: greg.buchanan@atcassociates.com



J. Russell Greisler, P.G.
Senior Geologist
Direct Line +1 323 517 9648
Email: russ.greisler@atcassociates.com

Attachments:

- Table 1 – Response to May 17, 2017 DTSC Letter
- Figure 1 – Site Plan
- Attachment 1 – Health and Safety Plan

Table 1 - Response to May 12, 2017 DTSC Letter
Proposed New Elementary and Middle Schools
Southeast Corner of Doris Avenue and Patterson Road
Oxnard, California

Item Number	DTSC Comment	ATC's Response
1	<p><i>During the excavations, DTSC recommends the shallow soils be segregated from the deeper soils since the OCP-impacted soils were only encountered at shallow depths. When collecting soil samples for evaluation of potential onsite reuse, DTSC requests that the samples be collected from different locations and different depths from the stockpiles.</i></p>	<p>ATC will add the proposed recommendations to the Soil Management Plan (SMP).</p>
2	<p><i>The PEA, dated March 29, 2017, proposed some precautionary measures to reduce exposure to residual OCPs in soil, such as replacement of the current topsoil with clean fill for potentially "high-contact" areas (e.g., planters, playgrounds, and playing fields). Please clarify whether these precautionary measures will be integrated into the SMP.</i></p>	<p>The language in the PEA regarding precautionary measures to reduce exposure to residual OCPs has been moved from the "Background" Section to the "Soil Management" Subsection of the SMP.</p>
3	<p><i>Page 3, second to last paragraph: When determining whether the soil from a certain stockpile can be reused on site, HERO recommends using the screening levels for residential land use (as school-based screening levels are not available) for evaluating stockpile soil sampling results. For composite samples, individual soil samples prior to compositing should be retained and the screening levels should be adjusted by dividing the number of points (four in this case) for composite. If any composite sampling data exceed the "adjusted" screening levels, the individual soil samples should be analyzed for comparison with the "un-adjusted" screening levels to determine if the soil should be removed from the site.</i></p>	<p>HERO's recommendations will be addressed in the SMP.</p>



LEGEND

--- SITE BOUNDARY



0 200
Approximate Scale in Feet

SCALE: 1" = 200'

SITE PLAN
DORIS AVENUE AND NORTH PATTERSON ROAD
OXNARD, CALIFORNIA

PROJECT NUMBER: 1011600826	PHASE: 1	FIGURE
REVIEW BY: G. BUCHANAN	DRAWN BY: DAW	1
 25 Cupania Circle Monterey Park, CA 91755 Ph: (323) 517-9780 *** Fax: (323) 517-9781		



HEALTH AND SAFETY PLAN

**Prepared By:
ATC Group
25 Cupania Circle
Monterey Park, CA 91755
Branch #10116
Los Angeles, California**



**Prepared For:
Oxnard School District
Proposed Elementary and Middle Schools
Southeast Corner of Doris Avenue and North Patterson Road
Oxnard, CA 93030**

ATC Project No. 1011600893

**ATC GROUP SERVICES
HEALTH AND SAFETY PLAN (HASP)**

CLIENT: Oxnard School District PROJECT NUMBER: 1011600893

SITE NAME: Proposed Elementary and Middle Schools

SITE LOCATION: Southeast Corner of Doris Avenue and North Patterson Road

PROJECT DESCRIPTION: Generalized site activities which intrude into subsurface soil at the site.

PREPARED BY: **Greg Buchanan** TITLE: **Senior Project Manager** DATE PREPARED: **3/22/17**

Greg Buchanan
Senior Project Manger


Signature

4/17/17
Date

This Health and Safety Plan (HASP) has been written for the use of the Oxnard School District and its employees and subcontractors. ATC assumes that all workers utilizing this HASP are properly trained and experienced; however, ATC does not guarantee the health or safety of any person performing work at this Site. This HASP has been prepared for the express purpose of mitigating risk associated with worker exposure to residual pesticides present in soil at the site. This HASP does not address potential hazards related to the physical activities to be performed at the site.

Due to the potential hazardous nature of this Site and the activity occurring thereon, it is not possible to discover, evaluate, and provide protection for all possible hazards which may be encountered. Strict adherence to the health and safety guidelines set forth herein will reduce, but not eliminate, the potential for injury at this Site. The health and safety guidelines in this Plan were prepared specifically for this Site and should not be used on any other Site without prior research by trained health and safety specialists.

ATC claims no responsibility for use of this Plan by others. The Plan is written for the specific Site conditions, purposes, dates, and personnel specified and must be amended if these conditions change.

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4.0 SITE SECURITY AND CONTROL

4.1 Work Zones

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6.2 Operations

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APPENDICES

APPENDIX A - Job Safety Analysis

APPENDIX B - Chemical Hazard Information

APPENDIX C - List of Approved Amendments/Changes
Acknowledgement/Agreement Form
Visitors Log

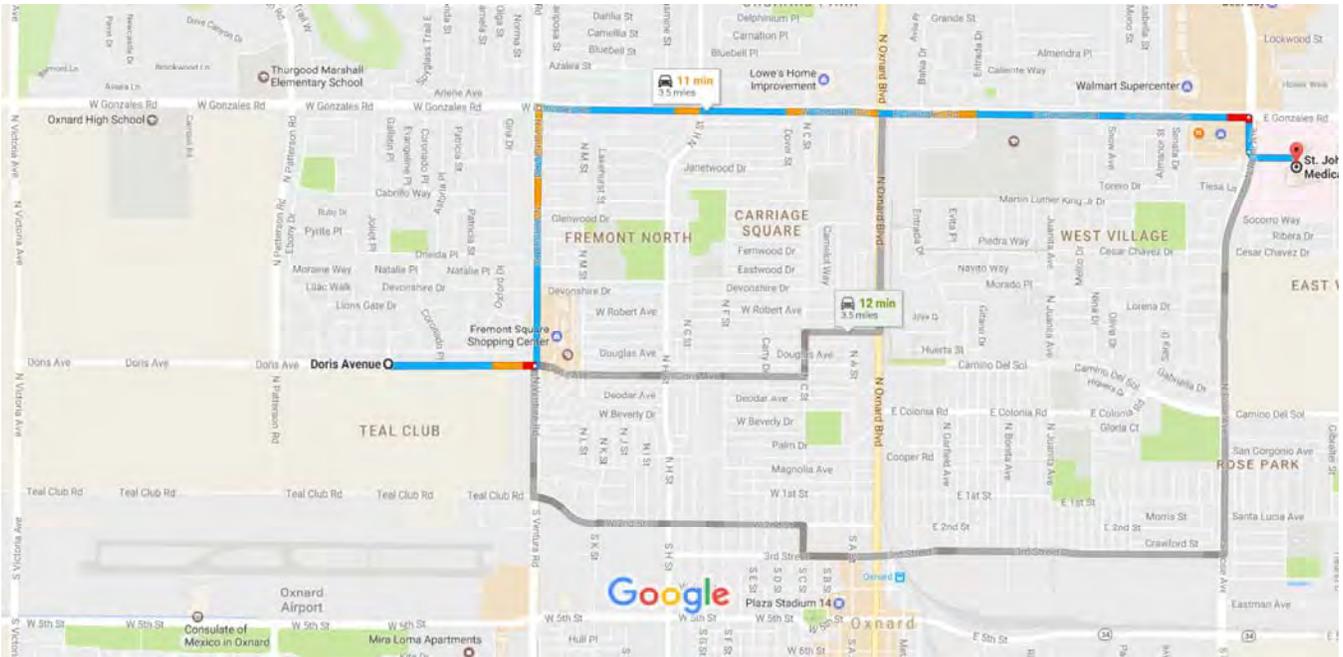
EMERGENCY MEDICAL ROUTE TO HOSPITAL

St John Regional Center
1600 N. Rose Avenue
Oxnard, CA 93030



Doris Ave, Oxnard, CA to St. John's Regional Medical Center Drive 3.5 miles, 11 min

Southeast Corner of Doris Avenue and North Patterson Road



Map data ©2017 Google 1000 ft

Doris Ave

Oxnard, CA

- ↑ 1. Head south on Doris Ave toward Doris Ave
0.4 mi
 - ↶ 2. Turn left onto N Ventura Rd
0.8 mi
 - ↷ 3. Turn right onto W Gonzales Rd
2.1 mi
 - ↷ 4. Turn right onto N Rose Ave
0.1 mi
 - ↶ 5. Turn left onto Mc Grath Dr W
0.1 mi
- [Destination will be on the right](#)

St. John's Regional Medical Center

1600 N Rose Ave, Oxnard, CA 93030

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

1.0 - INTRODUCTION

1.1 Scope and Applicability of the Site Health and Safety Plan

This HASP has been prepared by ATC for any activities that involve the disturbance of subsurface soil within the proposed elementary and middle school sites, located southeast of Doris Avenue and North Patterson Road in Oxnard, California.

The health and safety protocols established in this Plan are based on the Occupational Safety and Health Administration (OSHA) Regulations, past field experiences, specific Site conditions, and chemical hazards known or anticipated to be present from available Site data. The HASP is intended solely to address hazards associated with residual contamination previously encountered in site soil. This HASP does not cover hazards unrelated to the encountered soil contamination (ex. hazards associated with operation of heavy equipment, shoring, etc.). Specifications herein are subject to review and revision based on actual conditions encountered in the field during Site characterization activities. Such changes may be instituted by using the HASP List of Approved Amendments and/or Changes (see Appendix C).

Before Site operations begin, all employees covered by this plan (defined as those individuals working within close proximity of disturbed soil, involved in these operations will have read and understood this HASP and all revisions. All Site personnel have the authority to “Stop Work” if unsafe conditions are present or discovered during Site activities. Before work begins, all affected workers will sign the Health and Safety Plan Acknowledgment Form. By signing this form, all individuals recognize the requirements of the HASP, known or suspected hazards, and will adhere to the protocols required for the project Site.

This HASP is intended to complement, rather than supersede, any HASP prepared for the site by the Oxnard School District or any of their contractors. The scope of this HASP has been limited to the hazards associated with worker contact with pesticide-contaminated soil present at the site.

2.0 – TASK/OPERATION HEALTH AND SAFETY RISK ANALYSIS SUMMARY

This section of the HASP describes the safety and health hazards associated with the Site work and control measures selected to protect workers. The purpose of the Job Safety Analysis (JSA) is to identify the routine safety and health hazards associated with the routine Site tasks and operations. Using this information, appropriate control methods are selected to eliminate the identified risks or effectively control them.

2.1 Job Safety Analysis (JSA)

Task specific JSAs anticipated for the work are included in Appendix A. A single JSA may be used for a task/operation performed in multiple locations if the hazards, potential exposures, and controls are the same at each location.

If new JSAs or modified JSAs are required, site workers and/or contractors will consult with their management prior to proceeding. Blank JSA forms are included in Appendix A.

3.0 - PERSONAL PROTECTIVE EQUIPMENT

At a minimum, workers handling soil or cleaning equipment covered in soil are required to wear disposable nitrile (or equivalent) gloves when in contact with site soils. Depending on the task being performed, some or all of the personal protective equipment listed below may be necessary.

- Work uniform – Long pants and shirt with sleeves (no tank tops)
- ANSI cut and abrasion resistant gloves
- Chemical-resistant boots with steel toe
- Safety glasses with side shields
- High Visibility Reflective Vest
- Hard hat
- Hearing protection

Refer to the JSA prepared for the task being performed to determine which of the above-listed additional personal protective equipment is necessary.

4.0 - SITE SECURITY AND CONTROL

4.1 Work Zones

Restricted Site areas will include, but not necessarily be limited to, the following zones:

- **Exclusion Zone or Hot Zone** - any area where contamination is either known or likely to be present in concentrations that could pose a threat to human health and safety or that potential for harm to personnel exists because of the type of work activities being conducted. Appropriate PPE and warning signs should be utilized in this area.
- **Contamination Reduction Zone** - any area where workers conduct personal and equipment decontamination.
- **Support Zone** - areas where access is controlled, but the chance to encounter hazardous materials or conditions are minimal.

Access to the work zones will be controlled by work zone delineators (e.g. traffic cones, flags, vehicles, DOT approved devices, temporary or permanent fencing, and/or safety barrier tape).

In the event on-site personnel must upgrade their personal protective equipment, the work zones may require modification in order to provide for the safety of nearby personnel not associated with this work.

4.2 Site Communication

A loud and clear form of communication should be made available for Site personnel entering the work zones. Site communication may be in the form of hand signals, voice, or other communication devices. All forms of communication should be understood by all workers on the Site prior to starting work.

5.0 - DECONTAMINATION PROCEDURES

5.1 Personnel Decontamination

All personnel must complete appropriate decontamination procedures in a way that is responsive to actual Site conditions before leaving the Site. The decontamination of personnel and equipment will be performed within the exclusion and contamination reduction zones. If warranted, wash tubs containing an appropriate decon solution and soft bristle brushes will be used to decontaminate personal protective clothing and boots. Potable water will be used for the final rinse. In general, the four types of decontamination solutions to be considered for PPE include:

- Water for removal of low-molecular weight hydrocarbons, inorganic compounds, salts, some organic acids, and other polar compounds.
- Dilute acids (vinegar) for removal of basic (caustic) compounds, amines, and hydrazines.
- Dilute bases (soaps and detergents) for removal of acidic compounds, phenols, thiols, and some nitro and sulfonic compounds.
- Organic solvents for removal of nonpolar compounds (organic).

When performing personnel decontamination activities, complete the following steps (when applicable):

- Establish a segregated equipment drop
- Remove disposable, outer boot covers, if applicable
- Remove chemical resistant, outer gloves, if applicable
- Remove hard hat and goggles, safety glasses, or face shield, if applicable
- Remove disposable, inner gloves

If need arises, a specific plan will be developed for decontamination procedures shown below.

STATION #1: _____

Equipment Required: _____

STATION #2: _____

Equipment Required: _____

STATION #3: _____

Equipment Required: _____

STATION #4: _____

Equipment Required: _____

5.2 Equipment Decontamination

Personnel will decontaminate field equipment appropriately. This may include manual removal of gross contamination with shovels or other tools. If a high-pressure, hot water sprayer is utilized, the possibility of a splash and/or mist inhalation hazard, the task should be performed using appropriate personal protective equipment (goggles or face shield and respiratory protection) at a minimum.

Field tools (ex. shovels) may be scrubbed visually clean with water and a stiff, long-bristled scrub brush.

Equipment Decontamination

Gross Removal By:

<u>X</u> _____	Hand Scrubbing
_____	Cold High Pressure Wash
_____	Hot High Pressure Wash
<u>X</u> _____	Steam Cleaning
_____	Other (specify) _____
<u>X</u> _____	Clean Rinse
<u>X</u> _____	Decon solution (specify) <u>Dilute Liquinox</u>

5.3 Disposal of Decontamination Wastes

All materials and equipment used for decontamination should be disposed of in accordance with local, State, and/or Federal Regulations.

Decontamination Waste Water

Collection (specify how): Containerize in drum.

Direct Discharge (specify how and where): NA

Pre-Treatment (specify): NA

Disposal (specify how and where): Removal of drummed waste/discharge by licensed waste hauler.

6.0 - STANDARD OPERATING PROCEDURES

The following Standard Operating Procedures (SOPs) will be applied to each location and activity where work is performed. As hazards increase or decrease on the Site, the applicability of each SOP must be reevaluated.

6.1 Personnel Precautions

1. Eating, drinking, chewing gum or tobacco, smoking, and any practice that increases the probability of hand-to-mouth transfer and ingestion of material is prohibited in the exclusion and contamination reduction zone or in any area known to be contaminated.
2. When decontamination procedures for outer garments are in effect, the entire body should be thoroughly washed as soon as possible after the protective garment is removed.
3. Contact with contaminated or suspected contaminated surfaces should be avoided when possible.
4. All personnel must be familiar with Standard Operating Procedures and any additional instructions and information contained in this HASP. All workers will read the HASP before entering the work zone.
5. All personnel will be familiar with the chemicals potentially present in site soils. The chemical hazard information for the known on-site chemicals of concern are included in Appendix B of this HASP.

6.2 Operations

1. All personnel going to the Site must be adequately trained and thoroughly briefed on anticipated hazards, equipment, safety practices, emergency procedures, and communications.
2. Personnel and equipment in the contaminated area should be minimized, consistent with effective Site operations.
3. Work areas for various operational activities will be established.
4. Procedures for leaving a contaminated area will be planned and implemented before going to the Site. Work areas and decontamination procedures will be established based on expected Site conditions.

7.0 - CONTINGENCY PLAN

This section of the HASP describes potential emergencies at this Site and the procedures for responding to those emergencies.

7.1 Medical Emergencies

1. The name, address, telephone number, travel distance, and travel time to the nearest medical treatment facility are found in the Emergency Information section (see Emergency Info-1) of this HASP. A map and direction for locating the facility is available in the Emergency Information section of this HASP.
2. Any person who becomes ill or injured in the exclusion zone must be decontaminated as well as possible with consideration to which risk will be greater; the spread of contamination or the health of the individual. If the injury or illness is minor, full decontamination (remove contaminated clothing and wash hands and face with soap and water, See Section 5.0) should be completed and first-aid administered before transport. If the patient's condition is serious, the decontamination requirement may be waived. First-aid should be administered while awaiting an ambulance or paramedics.
3. The following steps should be followed if an injury or illness case occurs:
 - Check the Scene.
 - If safe to do so, check the condition of the injured.
 - Call 911 if the victim is unconscious or your training dictates to do so.
 - Care for the injured. Always use "Universal Precautions".

7.2 Site Evacuation Conditions

The following conditions will necessitate the cessation of field work in the area of concern, withdrawal from the work area, and revisions to this HASP:

- Fires and/or explosions
- Unexploded ordnance is detected
- A major incident or injury occurs
- Flammable atmosphere readings above 10 percent LEL
- Oxygen readings above 23.5 percent oxygen concentration
- Oxygen readings at or below 19.5 percent oxygen concentration
- PID readings over 50 ppm sustained for more than 5 minutes
- Detector tube readings over the maximum Action Level for the contaminant specified

APPENDIX A
Job Safety Analysis Forms



JSA

JOB SAFETY ANALYSIS

For RM Department Use
 JSA NO: EM-002f
 Primary Job Category: Environmental Management

DESCRIPTION OF JOB: Soil Handling		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 1 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input checked="" type="checkbox"/> CHEMICAL RESISTANT GLOVE: Nitrile	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING PID	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

STOP WORK

Employees must stop work and contact off-site senior personnel when a change in condition, process, or job phase develops on the project site that is not addressed by this JSA or within the project specific HASP. The JSA should be modified with new steps, hazards, and safe procedures agreed upon by all ATC and Subcontractor employees at the project site and approved by off-site senior personnel. Documentation of the modification and review by all affected personnel must take place.

1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES
Move equipment into place on project site	Pedestrians	<ul style="list-style-type: none"> When backing equipment into place a spotter must be used. Back-up alarm on equipment. All employees/workers in the area should wear a traffic reflective vest.
	Other vehicles	<ul style="list-style-type: none"> When backing equipment into place a spotter must be used. Spotter must have on traffic safety vest. Equipment driver should yield to other vehicles.
	Overhead obstacles	<ul style="list-style-type: none"> Driver and spotter should walk the travel path and discuss the movement of the equipment. When backing equipment into place a spotter must be used.
	Damage to private property	<ul style="list-style-type: none"> When backing equipment into place a spotter must be used. Driver and spotter should walk the travel path and discuss the movement of the equipment
Site setup	See JSA site setup	<ul style="list-style-type: none"> See JSA site setup
Soil Handling	Chemical contact	<ul style="list-style-type: none"> Wear nitrile gloves.
	Back injuries	<ul style="list-style-type: none"> Follow safe lifting procedures of lifting with the legs not the back. Avoid setting tools and other equipment on the ground. Set at waist level.
	Tripping hazards	<ul style="list-style-type: none"> Maintain a clear path between the sample location and the preparation area. Dry up water as quickly as possible.
Drum handling	See JSA drum handling	<ul style="list-style-type: none"> See JSA drum handling
Decon	See JSA Decon	<ul style="list-style-type: none"> See JSA Decon



JSA

JOB SAFETY ANALYSIS

For RM Department Use
 JSA NO: EM-002f
 Primary Job Category: Environmental Management

DESCRIPTION OF JOB: Soil Handling		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 2 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			
REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

STTOOPP WWOORRKK

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Please explain additional steps, changes or amendments to this JSA in the provided space below. Prior to starting work ensure that all employees understand and agree with the changes in this JSA.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Site Setup		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 1 of 4

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES
Drive around site	<ul style="list-style-type: none"> Traffic Pedestrians 	<ul style="list-style-type: none"> Use defensive driving techniques Yield to all pedestrians. Use defensive driving techniques
Load/Unload equipment and supplies	<ul style="list-style-type: none"> Vehicles 	<ul style="list-style-type: none"> When backing the drill rig, vehicles with trailers, or other large vehicles a spotter must be used. Use barrier controls with a height of at least 36 inches. Wear traffic reflective vest. Caution tape or snow fence should be used to surround the work site.
	<ul style="list-style-type: none"> Pedestrians 	<ul style="list-style-type: none"> Use barrier controls with a height of at least 36 inches. Place signs indicating authorized personnel only at entrance to site. When backing the drill rig, vehicles with trailers, or other large vehicles a spotter must be used. Caution tape or snow fence should be used to surround the work site.
	<ul style="list-style-type: none"> Weather 	<ul style="list-style-type: none"> Prevent heat and cold illnesses by: drinking water frequently and moderately; rest frequently; wear light colored clothing; eat light meals. Adjust work schedule to avoid temperature extremes. Sunscreen Layer clothing to adjust to changing environmental temperatures Avoid drinks with caffeine (coffee, tea, or soda) or alcohol. Use the buddy system (work in pairs).
	<ul style="list-style-type: none"> Slips, trips and falls 	<ul style="list-style-type: none"> Maintain housekeeping. Set up work zone with enough room for staging of equipment and supplies such that there are aisle ways for walking and working.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Site Setup		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 2 of 4

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES
		<ul style="list-style-type: none"> If on pavement or concrete sweep up loose sand, dirt or rock Wear slip resistant steel toed boots. Keep foot wear clean of mud and other debris. Setup areas away from snow and ice. If ice is present wear yak-traks on boots.
	<ul style="list-style-type: none"> Insects and animals 	<ul style="list-style-type: none"> Look around area before setting up for the presence of bee nests and cob webs. Do not disturb – leave them alone. If stray dogs are present go indoors or the cab of the truck and wait for it to leave. Call animal control. If you encounter bees or poisonous spiders leave the area and call the Project Manager. Keep hands and feet out of areas you can not see.
	<ul style="list-style-type: none"> Back Injuries 	<ul style="list-style-type: none"> Use proper lifting procedures – avoid lifting with the back and twisting. Do not lift over 50 pounds without assistance.
	<ul style="list-style-type: none"> Hand Injuries 	<ul style="list-style-type: none"> Wear work gloves – leather or craftsman while setting up. Watch hand placement – always know where your hands are at. Do not place your hand in direct path of a tool or between two objects.
	<ul style="list-style-type: none"> Heavy Equipment 	<ul style="list-style-type: none"> Spotters must be used at all times when heavy equipment is being operated. All onsite personnel must wear safety reflective vest. Operator must follow spotters hand signals and remove hands from controls when not working. Site personnel should only approach the spotter Backup alarm is required on heavy equipment.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Site Setup		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 3 of 4

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES
Underground Utility Locate	<ul style="list-style-type: none"> Vehicles 	<ul style="list-style-type: none"> Wear traffic reflective vest. A spotter should walk with the utility locator looking for hazards whenever the locator is looking down.
	<ul style="list-style-type: none"> Weather 	<ul style="list-style-type: none"> Prevent heat and cold illnesses by: drinking water frequently and moderately; rest frequently; wear light colored clothing; eat light meals. Adjust work schedule to avoid temperature extremes. Sunscreen Layer clothing to adjust to changing environmental temperatures Avoid drinks with caffeine (coffee, tea, or soda) or alcohol. Use the buddy system (work in pairs).
	<ul style="list-style-type: none"> Slips, trips and falls 	<ul style="list-style-type: none"> Wear slip resistant steel toed boots with ankle support. Keep foot wear clean of mud and other debris. If ice is present wear yak-traks on boots.
	<ul style="list-style-type: none"> Insects and animals 	<ul style="list-style-type: none"> Look around area before setting up for the presence of bee nests and cob webs. Do not disturb – leave them alone. If stray dogs are present go indoors or the cab of the truck and wait for it to leave. Call animal control. If you encounter bees or poisonous spiders leave the area and call the Project Manager. Keep hands and feet out of areas you can not see.

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT
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JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Site Setup		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 4 of 4

<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:

REQUIRED TOOLS/EQUIPMENT/SUPPLIES

<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

STOP WORK

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Please explain additional steps, changes or amendments to this JSA in the provided space below. Prior to starting work ensure that all employees understand and agree with the changes in this JSA.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Field Work Observation and Note Taking		REVISION DATE:	JSA CREATED ON: 08/02/2016
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 1 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> GLOVE _____	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			<input type="checkbox"/> OTHER:

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES
Walking around the Site for observing and noting health and safety along with miscellaneous data collection assistance.	Traffic and Movement of Equipment	<ul style="list-style-type: none"> Glove - _____. Communicate your intentions to others involved. Make sure they understand where and what you will be doing before you do it.
	Adjusting Safety Cones and Tape	<ul style="list-style-type: none"> Glove - _____. Communicate your intentions to others involved. Make sure they understand where and what you will be doing before you do it.
	Slips, Trips and Fall Hazards	<ul style="list-style-type: none"> Have field staff maintain housekeeping. Have field staff set up work zone with enough room for staging of equipment and supplies such that there are aisle ways for walking and working.
	Hand Injuries	<ul style="list-style-type: none"> Glove - _____.
	Noise	<ul style="list-style-type: none"> Wear hearing protection.
	Hazardous Atmosphere	<ul style="list-style-type: none"> Operate in a well ventilated area. Stand upwind while observing. Have field staff use a PID or FID to monitor the area for potential hazardous atmosphere.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Field Work Observation and Note Taking		REVISION DATE:	JSA CREATED ON: 08/02/2016
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 2 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> GLOVE _____	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			<input type="checkbox"/> OTHER:
REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB: Drum Handling		REVISION DATE:	JSA CREATED ON: 08/02/16
PREPARED BY: Ben Chevlen	REVIEWED BY:	APPROVED BY:	PAGE: 1 of 5

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST <input type="checkbox"/> HARD HAT <input type="checkbox"/> SAFETY TOED BOOTS <input type="checkbox"/> SAFETY GLASSES <input type="checkbox"/> FACE SHIELD	<input type="checkbox"/> LONG PANTS <input checked="" type="checkbox"/> GLOVE <u>LEATHER</u> <input type="checkbox"/> CHEMICAL RESISTANT GLOVE: <input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> AIR PURIFYING RESPIRATOR <input type="checkbox"/> SUPPLIED AIR RESPIRATOR <input type="checkbox"/> CHEMICAL RESISTANT CLOTHING: <input type="checkbox"/> GOGGLES	<input type="checkbox"/> GLOVE _____ <input type="checkbox"/> GLOVE _____ <input type="checkbox"/> GLOVE _____ <input type="checkbox"/> OTHER: <input type="checkbox"/> OTHER:

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
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Storage of Drum Dolly	Tripping Hazard, Tip-Over Hazard	<ul style="list-style-type: none"> If dolly is to be stored in upright position, and has "Kick Stand", use the kick stand to keep dolly in upright position or keep it attached to a standing drum. If dolly is to be stored in horizontal position, turn the dolly over so that the forks (drum cleats) are in contact with the ground and not sticking out into a work space. If temporarily storing dolly in horizontal (on the wheels) position, ensure that the forks are protected against workers hitting them. Where possible, store the dolly out of the immediate work area to minimize chance for dolly being tipped over or tripped over. Ensure that all employees are aware of storage considerations.
Drum Handling (Empty Drums)	Overexertion Injuries (lifting or moving drums)	<ul style="list-style-type: none"> When moving drums, use the drum dolly. Secure assistance as needed for heavier drums (even if empty).
	Eye Injuries (dust, dirt, or metal particles kicked up as result of moving drums or unfastening lids and sealing rings)	<ul style="list-style-type: none"> Use safety eyewear with side shields. Be observant of materials on top of lids before opening them.
	Hand Injuries (pinch points or cuts due to sharp metal edges or burrs)	<ul style="list-style-type: none"> Glove <u>leather</u> when handling drums. Use safe position with hands (do not place between drums and fixed objects, including other drums). If others are helping with drums, ensure that their hands are also in safe position before moving drums. Anticipate possible metal burrs on drum lids or sealing rings, and on metal bolt fasteners.



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<input type="checkbox"/> HARD HAT	<input checked="" type="checkbox"/> GLOVE <u>LEATHER</u>	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> GLOVE _____
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			<input type="checkbox"/> OTHER:

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
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	Tripping Hazards (drum lids, sealing rings)	<ul style="list-style-type: none"> Use the proper tool for removing lid rings. When removing drum lids and sealing rings for visual drum inspections, do NOT create tripping hazards by placing lids or rings in walkways.
	Foot/Ankle Injuries (drums or dolly parts striking ankles or feet)	<ul style="list-style-type: none"> Use safety footwear (steel-toed shoes or boots) when handling drums and drum dolly Ensure feet are in safe position when lowering drums to floor or removing dolly from under drums.
Drum Dolly Use	Hand, Eye, or Foot Injuries	<ul style="list-style-type: none"> Refer to PPE requirements from above.
	Overexertion Injuries	<ul style="list-style-type: none"> When moving drum dolly, roll it on its wheels (rather than attempting to lift and carry it). Only use a 4 wheeled drum dolly.
	Finger Injuries (cuts or pinches)	<ul style="list-style-type: none"> When attempting to attach dolly to the drum, watch placement of fingers to avoid pinch points between dolly and drum and between two drums. Carefully place forks of dolly under the bottom of the drum – ensure forks are fully inserted under the drum. Affix the securing hook over the edge of the drum top.
	Bumping Into Other Employees, Trip Hazards	<ul style="list-style-type: none"> When drum is secured by forks at the bottom and securing hook at the top, check behind you to ensure you still have adequate room, no pedestrian or other traffic, and no obstructions in your path of travel. Gently rock the drum back toward you until wheels are fully engaged with travel surface. Slowly roll the dolly and drum to the desired position. Tip the drum back into vertical position and reverse steps for temporary



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		storage of dolly.
Moving Drums (Pathways)	Uneven Surfaces (can cause drum and dolly to tip over, or sink into terrain) Weight of Drums (creating an overexertion hazard)	<ul style="list-style-type: none"> Check entire path that drum and dolly must travel. If surface is not designed for wheeled traffic, make arrangements for temporary plates (plywood or similar) to allow safe movement of dolly. If surface is uneven, unpaved, or otherwise challenging, consider other methods of improvement. Where needed, use a "Spotter" to ensure no pedestrians or motorized vehicles enter pathway. For full drums, utilize helper to minimize the chance for sprains or strains. Do NOT attempt to lift full drums – let the dolly do the work.
Spotting Drum at End Location	Foot, Finger & Overexertion Injuries (pinch points, foot crush potential, sprains and strains)	<ul style="list-style-type: none"> Ensure that space where drum will be placed is adequate for drum. If other objects (or other drums) are in area, keep hands out of pinch points between drums (or other objects). When righting the drum at its destination, use 2 persons where needed. Keep feet out from under the drum and dolly at all times. Unhooks the securing hook from the drum lid area. Carefully slide the forks out from under the drum. Do not attempt to simply "yank" the forks out from under the drum, as dolly could slip back and strike employee's shins, ankles, or feet. If drum needs to be moved slowly into final position, watch fingers and pinch points. Use "Buddy System" to gradually shift drum position and ensure both parties are in communication of what each will do and to keep fingers out



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		of pinch points. <ul style="list-style-type: none"> When drum is removed from dolly, use steps outlined for temporary (or longer storage) of dolly.



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<input type="checkbox"/> FACE SHIELD			
REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

STOP WORK

Employees must stop work and contact off-site senior personnel when a change in condition, process, or job phase develops on the project site that is not addressed by this JSA or within the project specific HASP. The JSA should be modified with new steps, hazards, and safe procedures agreed upon by all ATC and Subcontractor employees at the project site and approved by off-site senior personnel. Documentation of the modification and review by all affected personnel must take place.

Please explain additional steps, changes or amendments to this JSA in the provided space below. Prior to starting work ensure that all employees understand and agree with the changes in this JSA.



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB:		REVISION DATE:	JSA CREATED ON:
PREPARED BY:	REVIEWED BY:	APPROVED BY:	PAGE: 1 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input checked="" type="checkbox"/> CHEMICAL RESISTANT GLOVE: Nitrile	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			

REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING PID	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

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1 JOB STEPS	2 POTENTIAL HAZARDOUS CONDITIONS or UNSAFE PRACTICES	3 SAFE PROCEDURES and PREVENTATIVE MEASURES



JSA

JOB SAFETY ANALYSIS

DESCRIPTION OF JOB:		REVISION DATE:	JSA CREATED ON:
PREPARED BY:	REVIEWED BY:	APPROVED BY:	PAGE: 2 of 2

MINIMUM REQUIRED PERSONAL PROTECTIVE EQUIPMENT			
<input type="checkbox"/> REFLECTIVE VEST	<input type="checkbox"/> LONG PANTS	<input type="checkbox"/> AIR PURIFYING RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> HARD HAT	<input type="checkbox"/> COTTON, LEATHER, OR CRAFTSMAN GLOVES	<input type="checkbox"/> SUPPLIED AIR RESPIRATOR	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY TOED BOOTS	<input type="checkbox"/> CHEMICAL RESISTANT GLOVE:	<input type="checkbox"/> CHEMICAL RESISTANT CLOTHING:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> SAFETY GLASSES	<input type="checkbox"/> HEARING PROTECTION	<input type="checkbox"/> GOGGLES	<input type="checkbox"/> OTHER:
<input type="checkbox"/> FACE SHIELD			
REQUIRED TOOLS/EQUIPMENT/SUPPLIES			
<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> RATCHET WITH EXTENSION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> BUG REPELLENT	<input type="checkbox"/> WELL MAGNET	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> TRAFFIC CONTROL DEVICES	<input type="checkbox"/> AIR MONITORING SELECT FROM LIST	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
<input type="checkbox"/> LADDER	<input type="checkbox"/> LOCKOUT/TAGOUT EQUIPMENT	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:

STOP WORK

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APPENDIX B
Chemical Hazard Information

Last Revision Date: 1/25/2012**SECTION 1 - CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

Catalog Number: S-13586M1
Description: Toxaphene (TM)
Product Type: Solution
Other Names: Camphechlor (TM)/Chlorinated camphene

Supplied by CHEM SERVICE, Inc. PO BOX 599, WEST CHESTER, PA 19381 (610)-692-3026
EMERGENCY PHONE: 1-610-692-3026

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS: 8001-35-2
Description: Toxaphene (TM) Solution
Concentration: 100ug/mL in Methanol
EINECS No: 232-283-3
Hazard Symbols: T, N

SECTION 3 - HAZARDS IDENTIFICATION

Contact lenses should not be worn in the laboratory.
All chemicals should be considered hazardous – Avoid direct physical contact!

For the solvent: Methanol

Health Risks: May be fatal if absorbed through the skin! Repeated exposure to vapors and/or dust can cause eye injury. May be fatal if inhaled! Can cause cardiovascular system injury. Exposure can cause liver damage. Exposure can cause kidney damage. May be fatal or cause blindness if swallowed. Can cause gastro-intestinal disturbances. Can cause convulsions.

CA Proposition 65: Data Not Available

For the minor component: Toxaphene (TM)

This chemical is considered to be a CARCINOGEN by the state of California.

SECTION 4 - FIRST AID MEASURES

An antidote is a substance intended to counteract the effect of a poison. It should be administered only by a physician or trained emergency personnel. Medical advice can be obtained from a POISON CONTROL CENTER.

For the solvent: Methanol

First Aid: In case of contact: Flush eyes continuously with water for 15-20 minutes. Flush skin with water for 15-20 minutes. If patient has stopped breathing administer artificial respiration. If patient is in cardiac arrest administer CPR. Continue life supporting measures until medical assistance has arrived. Do not wear shoes or clothing until absolutely free of all chemical odors. Get medical attention if necessary. If no burns have occurred-use soap and water to cleanse skin. If inhaled remove patient to fresh air. Administer oxygen if patient is having difficulty breathing. If swallowed do not induce vomiting.

SECTION 5 - FIRE AND EXPLOSION DATA

For the solvent: Methanol

Flash Point: 11°C This is a flammable chemical.

Extinguishing Media: Carbon dioxide or dry chemical powder. DO NOT USE WATER!

Upper Explosion Limit: 36%
Lower Explosion Limit: 6.0%
Autoignition Temperature: 464°C

NFPA Scale: 0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Severe
NFPA Hazard Rating: Health: 1. Reactivity: 0. Flammability: 3. Special: No Data.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Spills or leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Absorb on vermiculite or similar material. Sweep up and place in an appropriate container. Hold for disposal.

Wash contaminated surfaces to remove any residues.
Remove contaminated clothing and wash before reuse.

SECTION 7 - HANDLING AND STORAGE

Handling:

This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment.

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation.

Wash thoroughly after handling.

Storage:

Store in a cool dry place. Store only with compatible chemicals. Keep tightly closed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

For the solvent: Methanol

OSHA PEL (TWA): 200 ppm (260 mg/m³)

ACGIH TLV (TWA): 200 ppm (262 mg/m³)

ACGIH TLV (STEL): Data Not Available

Personal Protective Equipment

Eyes: Wear Safety Glasses.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant the use of a respirator.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

For the solvent: Methanol

Color:	Colorless
Phase:	Liquid
Melting Point:	-98°C
Boiling Point:	64.6°C
Specific Gravity:	0.791g/mL
Vapor Density:	1.11
Vapor Pressure:	130.3 hPa @ 20°C
Solubility in Water:	Completely miscible.
Odor:	Data Not Available
Evaporation Rate (Butyl acetate=1):	Data Not Available
Molecular Weight:	32.05
Molecular Formula:	CH ₄ O

SECTION 10 - STABILITY AND REACTIVITY

For the solvent: Methanol

Flammable. Reacts with Acid halides and anhydrides. Incompatible with strong acids. Incompatible with strong reducing agents. Incompatible with strong oxidizing agents. Decomposition liberates toxic fumes. Hygroscopic. Incompatible with active metals (e.g. Sodium).

SECTION 11 - TOXICOLOGY INFORMATION

The primary hazards for this solution are predominantly from the solvent.

For the solvent: Methanol

RTECS: PC1400000
Oral Rat or Mouse LD50: 5628 mg/kg
Dermal Rat or Mouse LD50: N/A mg/kg
Rat or Mouse LC50 : 64000 ppm/8H

Carcinogenicity

OSHA: No IARC: No NTP: No ACGIH: No A4 NIOSH: No Other: No

For the minor component: Toxaphene (TM)

The LD50 for the minor component:

<i>Description</i>	<i>LD50</i>
Toxaphene (TM)	40 mg/kg

Carcinogenicity:

OSHA: No IARC: Yes NTP: Yes CARC: No ACGIH: No NIOSH: Yes

This chemical is considered to be a CARCINOGEN by the state of California.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: Not Available
Environmental Fate: Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

UN Number: UN1230
Class: 3
Packing Group: II
Proper Shipping Name: Methanol

SECTION 15 - REGULATORY INFORMATION

For the solvent: Methanol

European Labeling in Accordance with EC Directives
Hazard Symbols: T F

- Risk Phrases: -R11: Highly Flammable.
 -R23/25: Toxic by inhalation, and if swallowed.
- Safety Phrases: -S16: Keep away from sources of ignition - No smoking.
 -S2: Keep out of reach of children
 -S24: Avoid contact with the skin
 -S45: In case of accident or if you feel unwell, seek medical advice immediately
 (show label where possible).
 -S7: Keep container tightly closed

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded MSDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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This product is furnished FOR LABORATORY USE ONLY!

SIGMA-ALDRICH

MATERIAL SAFETY DATA SHEET

Date Printed: 28.07.2016

Date Updated: 31.05.2012

Version 1.6

Section 1 - Product and Company Information

Product Name	METHOXYCHLOR
Product Number	M1501
Brand	SIGMA
Company	Sigma-Aldrich
Address	3050 Spruce Street SAINT LOUIS MO 63103 US
Technical Phone:	800-325-5832
Fax:	800-325-5052
Emergency Phone:	314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
METHOXYCHLOR	72-43-5	Yes

Formula C16H15Cl3O2

Synonyms

Benzene,
 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy- *
 2,2-Bis(p-anisyl)-1,1,1-trichloroethane *
 1,1-Bis(p-methoxyphenyl)-2,2,2-trichloroethane *
 2,2-Bis(p-methoxyphenyl)-1,1,1-trichloroethane *
 Dianisyltrichlorethane *
 2,2-Di-p-anisyl-1,1,1-trichloroethane *
 Dimethoxy-DDT *
 p,p'-Dimethoxydiphenyltrichloroethane *
 2,2-Di-(p-methoxyphenyl)-1,1,1-trichloroethane *
 Di(p-methoxyphenyl)-trichloromethyl methane *
 DMDT * p,p'-Dwumetoksydwufenylotrojchloroetan
 (Polish) * ENT 1,716 * Ethane,
 2,2-bis(p-anisyl)-1,1,1-trichloro- * Higalmetox *
 Marlata * Methoxycide * Methoxychlor (ACGIH:OSHA)
 * p,p'-Methoxychlor * Methoxychlor 2 EC *
 Methoxy-DDT * Metoksychlor (Polish) * Metox *
 Mezo K * Moxie * NCI-C00497 * OMS 466 * RCRA
 waste number U247 *
 1,1,1-Trichlor-2,2-bis(4-methoxy-phenyl)-aethan
 (German) *
 1,1,1-Trichloro-2,2-bis(p-anisyl)ethane *
 1,1'-(2,2,2-Trichloroethylidene)bis(4-methoxybenze
 ne) *
 1,1,1-Trichloro-2,2-bis(p-methoxyphenyl)ethane *
 1,1,1-Trichloro-2,2-bis(4-methoxyphenyl)ethane *
 2,2,2-Trichloro-1,1-bis(4-methoxyphenyl)ethane *
 1,1,1-Trichloro-2,2-di(4-methoxyphenyl)ethane *
 4,4-(2,2,2-Trichloroethylidene)dianisole

RTECS Number: KJ3675000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful.

Harmful by inhalation, in contact with skin and if swallowed.

Limited evidence of a carcinogenic effect.

Possible mutagen. Reproductive hazard. Target organ(s): Nerves.

Kidneys.

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

EYE EXPOSURE

Assure adequate flushing of the eyes by separating the eyelids with fingers.

Section 5 - Fire Fighting Measures

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)

Material: Harmful solid.

Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid inhalation. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

EXPOSURE LIMITS, RTECS

Country	Source	Type	Value
USA	ACGIH	TWA	10 MG/M3
USA	MSHA Standard-air	TWA	10 MG/M3
USA	OSHA.	PEL	8H TWA 15 MG/M3, TOTAL DUST
New Zealand OEL			
Remarks: check ACGIH TLV			
USA	NIOSH		(0.07 MG/M3 LOQ)

EXPOSURE LIMITS

Country	Source	Type	Value
Poland		NDS	10 MG/M3
Poland		NDSch	-
Poland		NDSP	-

Section 9 - Physical/Chemical Properties

Appearance	Physical State: Solid	
Property	Value	At Temperature or Pressure
Molecular Weight	345,6600 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	86,000. - 88,000 °C.	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	

Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Hydrogen chloride gas.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Multiple Routes: May cause irritation. Harmful if swallowed, inhaled, or absorbed through skin.

TARGET ORGAN(S) OR SYSTEM(S)

Kidneys. Central nervous system.

TOXICITY DATA

Oral
Human
6430,000000 mg/kg
LDLO

Oral
Rat
1855,000000 mg/kg
LD50
Remarks: Behavioral:Excitement. Behavioral:Convulsions or effect on seizure threshold. Behavioral:Ataxia.

Skin
Rat
> 6000,000000 mg/kg
LD50

Oral
Mouse
510,000000 mg/kg
LD50
Remarks: Behavioral:Convulsions or effect on seizure threshold. Behavioral:Ataxia. Behavioral:Excitement.

Oral
Rabbit

> 6000,000000 mg/kg
LD50

Skin
Rabbit
> 6000,000000 mg/kg
LD50

Intraperitoneal
Hamster
500 MG/KG
LD50

Oral
Duck
> 2000,000000 mg/kg
LD50

CHRONIC EXPOSURE - CARCINOGEN

Species: Rat
Route of Application: Oral
Dose: 18200 MG/KG
Exposure Time: 2Y
Frequency: C
Result: Tumorigenic: Carcinogenic by RTECS criteria. Tumorigenic
Effects: Prostate tumors.

Species: Mouse
Route of Application: Oral
Dose: 56700 MG/KG
Exposure Time: 90W
Frequency: C
Result: Tumorigenic: Carcinogenic by RTECS criteria. Lungs,
Thorax, or Respiration: Tumors. Tumorigenic Effects: Testicular
tumors.

Species: Dog
Route of Application: Oral
Dose: 383 GM/KG
Exposure Time: 3Y
Frequency: C
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS
criteria. Liver: Tumors.

Species: Rat
Route of Application: Oral
Dose: 41 GM/KG
Exposure Time: 2Y
Frequency: C
Result: Tumorigenic: Equivocal tumorigenic agent by RTECS
criteria. Liver: Multiple effects. Lungs, Thorax, or
Respiration: Other changes.

Species: Mouse
Route of Application: Oral
Dose: 62622 MG/KG
Exposure Time: 2Y
Frequency: C
Result: Liver: Tumors. Tumorigenic: Equivocal tumorigenic agent by

RTECS criteria.

Species: Rat
Route of Application: Oral
Dose: 80 GM/KG
Exposure Time: 2Y
Frequency: C
Result: Liver:Tumors. Tumorigenic:Carcinogenic by RTECS
criteria. Tumorigenic Effects: Ovarian tumors.

Species: Rat
Route of Application: Oral
Dose: 72800 MG/KG
Exposure Time: 2Y
Frequency: C
Result: Liver:Tumors. Tumorigenic:Carcinogenic by RTECS criteria.

Species: Rat
Route of Application: Oral
Dose: 87360 MG/KG
Exposure Time: 2Y
Frequency: C
Result: Tumorigenic:Carcinogenic by RTECS criteria. Liver:Tumors.

Species: Rat
Route of Application: Oral
Dose: 10920 MG/KG
Exposure Time: 1Y
Frequency: C
Result: Blood:Lymphomas including Hodgkin's disease.
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.

Species: Rat
Route of Application: Oral
Dose: 45500 MG/KG
Exposure Time: 1Y
Frequency: C
Result: Blood:Lymphomas including Hodgkin's disease.
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria.

IARC CARCINOGEN LIST

Rating: Group 3

NTP CARCINOGEN LIST

Rating: No evidence.
Species: Mouse/rat
Route: Feed

ACGIH CARCINOGEN LIST

Rating: A4

CHRONIC EXPOSURE - TERATOGEN

Species: Rat
Dose: 2 GM/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)

Result: Specific Developmental Abnormalities: Musculoskeletal system.

Species: Mouse

Dose: 3 GM/KG

Route of Application: Oral

Exposure Time: (6-15D PREG)

Result: Effects on Embryo or Fetus: Fetal death.

CHRONIC EXPOSURE - MUTAGEN

Species: Rat

Dose: 150 UMOL/L

Cell Type: liver

Mutation test: DNA damage

Species: Rat

Route: Oral

Dose: 28 GM/KG

Exposure Time: 10W

Mutation test: sperm

Species: Mouse

Dose: 10 MG/L (+S9)

Cell Type: lymphocyte

Mutation test: Mutation in microorganisms

Species: Mouse

Dose: 2 MG/L

Cell Type: fibroblast

Mutation test: Morphological transformation.

Species: Mouse

Route: Oral

Dose: 6 MG/KG

Exposure Time: 50D

Mutation test: Cytogenetic analysis

Species: Hamster

Dose: 10 MG/L

Cell Type: Embryo

Mutation test: Morphological transformation.

Species: Hamster

Route: Intraperitoneal

Dose: 50 MG/KG

Mutation test: Cytogenetic analysis

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Result: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Species: Rat

Dose: 66 GM/KG

Route of Application: Oral

Exposure Time: (33D MALE)

Result: Paternal Effects: Testes, epididymis, sperm duct.

Paternal Effects: Prostate, seminal vesicle, Cowper's gland, accessory glands.

Species: Rat
Dose: 2 GM/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Rat
Dose: 4250 MG/KG
Route of Application: Oral
Exposure Time: (42D PRE-21D POST)
Result: Effects on Newborn: Physical. Maternal Effects: Ovaries, fallopian tubes. Effects on Newborn: Delayed effects.

Species: Rat
Dose: 10625 MG/KG
Route of Application: Oral
Exposure Time: (42D PRE-21D POST)
Result: Effects on Fertility: Mating performance (e.g., # sperm positive females per # females mated; # copulations per # estrus cycles). Maternal Effects: Uterus, cervix, vagina. Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated).

Species: Rat
Dose: 7 GM/KG
Route of Application: Unreported
Exposure Time: (70D MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).

Species: Rat
Dose: 2100 MG/KG
Route of Application: Unreported
Exposure Time: (21D PRE)
Result: Maternal Effects: Oogenesis.

Species: Rat
Dose: 9100 MG/KG
Route of Application: Unreported
Exposure Time: (70D MALE/21D PRE)
Result: Effects on Fertility: Mating performance (e.g., # sperm positive females per # females mated; # copulations per # estrus cycles).

Species: Mouse
Dose: 1 GM/KG
Route of Application: Oral
Exposure Time: (20D PREG)
Result: Maternal Effects: Ovaries, fallopian tubes.

Species: Mouse
Dose: 900 MG/KG
Route of Application: Oral
Exposure Time: (6-8D PREG)
Result: Maternal Effects: Uterus, cervix, vagina.

Species: Mouse
Dose: 2 GM/KG
Route of Application: Oral
Exposure Time: (6-15D PREG)
Result: Maternal Effects: Parturition.

Species: Mouse
Dose: 800 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (1D PREG)
Result: Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Species: Mouse
Dose: 99 MG/KG
Route of Application: Subcutaneous
Exposure Time: (5-7D PREG)
Result: Effects on Newborn: Behavioral. Effects on Newborn: Biochemical and metabolic.

Species: Rabbit
Dose: 330 MG/KG
Route of Application: Oral
Exposure Time: (6-27D PREG)
Result: Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s.
UN#: 3077
Class: 9
Packing Group: Packing Group III
Hazard Label: Class 9
PIH: Not PIH

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xn

Indication of Danger: Harmful.

R: 20/21/22-40

Risk Statements: Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect.

S: 7-23-36/37/39-45

Safety Statements: Keep container tightly closed. Do not breathe fumes. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Harmful.

Risk Statements: Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect.

Safety Statements: Keep container tightly closed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Do not breathe fumes. Wear suitable protective clothing, gloves, and eye/face protection.

US Statements: Possible mutagen. Reproductive hazard. Target organ(s): Nerves. Kidneys.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes

NOTES: This product is subject to SARA section 313 reporting requirements.

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: Yes

NDSL: No

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	Toxic compound, do not ingest or inhale. Avoid all contact with this material.	   

Section I. Chemical Product and Company Identification

Chemical Name	Dieldrin		
Catalog Number	H0059	Supplier	TGI America 9211 N. Harborage St. Portland OR 1-800-423-8616
Synonym	Alvit 55		
Chemical Formula	C ₁₂ H ₈ Cl ₆ O		
CAS Number	60-57-1	In case of Emergency Call	Chemtrec® (800) 424-9300 (U.S.) (703) 527-3887 (International)

Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
Dieldrin	60-57-1	-----	Not available.	Rat LD ₅₀ (oral) 383 mg/kg

Section III. Hazards Identification

Acute Health Effects	Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.
Chronic Health Effects	CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY Not available. Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section IV. First Aid Measures

Eye Contact	Check for and remove any contact lenses. DO NOT use an eye ointment. Flush eyes with running water for a minimum of 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention. Treat symptomatically and supportively.
Skin Contact	If the chemical gets spilled on a clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. Seek medical attention. Treat symptomatically and supportively. Wash any contaminated clothing before reusing.
Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform artificial respiration. WARNING: It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention and, if possible, show the chemical label. Treat symptomatically and supportively.
Ingestion	INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt, or waistband. If the victim is not breathing, administer artificial respiration. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Seek immediate medical attention and, if possible, show the chemical label. Treat symptomatically and supportively.

Section V. Fire and Explosion Data

Flammability	Combustible.	Auto-Ignition	Not available.
Flash Points	Not available.	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO ₂), halogenated compounds. WARNING: Highly toxic HCl gas is produced during combustion.		
Fire Hazards	No specific information is available regarding the flammability of this compound in the presence of various materials.		
Explosion Hazards	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. No additional information is available regarding the risks of explosion.		

Continued on Next Page

Emergency phone number (800) 424-9300

Fire Fighting Media
and Instructions

SMALL FIRE: Use DRY chemicals, CO₂, water spray or foam.
LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

Section VI. Accidental Release Measures

Spill Cleanup
Instructions

Toxic solid.
Stop leak if without risk. DO NOT get water inside container. DO NOT touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Consult federal, state, and/or local authorities for assistance on disposal. Consult federal, state, and/or local authorities for assistance on disposal.

Section VII. Handling and Storage

Handling and Storage
Information

TOXIC. Handle with caution and minimize exposure. Keep away from heat and sources of ignition. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. DO NOT ingest. DO NOT breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Treat symptomatically and supportively. Avoid contact with skin and eyes.
Always store away from incompatible compounds such as oxidizing agents.

Section VIII. Exposure Controls/Personal Protection

Engineering Controls

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection

Splash goggles. Lab coat. Dust respirator. Boots. Gloves. A MSHA/NIOSH approved respirator must be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.



Exposure Limits

Not available.

Section IX. Physical and Chemical Properties

Physical state @ 20°C

Orange-tan powder.

Solubility

Not available.

Specific Gravity

Not available.

Molecular Weight

380.91

Partition Coefficient

Not available.

Boiling Point

Not available.

Vapor Pressure

Not available.

Melting Point

143 to 144°C (289.4 to 291.2°F)

Vapor Density

13.2 (Air = 1)

Refractive Index

Not available.

Volatility

Not available.

Critical Temperature

Not available.

Odor

Not available.

Viscosity

Not available.

Taste

Not available.

Section X. Stability and Reactivity Data

Stability

This material is stable if stored under proper conditions. (See Section VII for instructions)

Conditions of Instability

Avoid excessive heat and light.

Incompatibilities

Highly reactive with oxidizing agents.

Section XI. Toxicological Information

RTECS Number

IO1750000

Routes of Exposure

Eye contact. Inhalation. Ingestion.

Toxicity Data

Rat LD₅₀ (oral) 383 mg/kg

Chronic Toxic Effects

CARCINOGENIC EFFECTS : Not available.
MUTAGENIC EFFECTS : Not available.
TERATOGENIC EFFECTS : Not available.
DEVELOPMENTAL TOXICITY Not available.
Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Acute Toxic Effects

Toxic if ingested or inhaled. Avoid prolonged contact with this material. Overexposure may result in serious illness or death. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

Section XII. Ecological Information

Ecotoxicity Not available.

Environmental Fate Not available.

Section XIII. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local or regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state, and local regulations when disposing of this substance.

Section XIV. Transport Information

DOT Classification DOT CLASS 6.1: Toxic material.

PIN Number UN2761

Proper Shipping Name Organochlorine pesticides, solid, toxic

Packing Group (PG) II

DOT Pictograms

**Section XV. Other Regulatory Information and Pictograms**

TSCA Chemical Inventory (EPA) This product is **NOT** on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:
 (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.
 (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on an MSDS sheet.

WHMIS Classification (Canada) WHMIS CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

EINECS Number (EEC) 200-484-5

EEC Risk Statements R25- Toxic if swallowed.
 R27/28- Very toxic in contact with skin and if swallowed.

Japanese Regulatory Data Not available.

Section XVI. Other Information**Version 1.0**

Validated on 5/28/1997.

Printed 2/24/2005.

Notice to Reader

TCl laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.

SAFETY DATA SHEET

1. SUBSTANCE AND SOURCE IDENTIFICATION

Product Identifier

RM Number: 8469
RM Name: 4,4'-DDT
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Reference Material (RM) is intended for use in the evaluation of procedures and working standards in used in the measurement of dichlorodiphenyltrichloroethane (4,4'-DDT) in environmental samples. RM 8469 is provided as a primary reference compound of measured purity for 4,4'-DDT. A unit of RM 8469 consists of one vial containing approximately 100 mg of 4,4'-DDT.

Company Information

National Institute of Standards and Technology
 Standard Reference Materials Program
 100 Bureau Drive, Stop 2300
 Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
 FAX: 301-948-3730
 E-mail: SRMMSDS@nist.gov
 Website: <http://www.nist.gov/srm>

Emergency Telephone ChemTrec:
 1-800-424-9300 (North America)
 +1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Physical Hazard: Not classified.
Health Hazard: Acute Toxicity, Oral, Dermal Category 3
 Carcinogenicity Category 2
 STOT, Repeated exposure Category 1

Label Elements

Symbol



Signal Word

DANGER

Hazard Statement(s):

H301+H311 Toxic if swallowed or in contact with skin.
 H351 Suspected of causing cancer.
 H372 Causes damage to organs <central nervous system> through prolonged or repeated exposure <ingestion>.

Precautionary Statement(s):

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust.
 P264 Wash hands thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P280 Wear protective gloves, protective clothing, and eye protection.
 P301+P310 If on skin: Wash with plenty of water.
 P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P301+P310 If swallowed: Immediately call a doctor.
P330 Rinse mouth.
P312 Call a doctor.
P405 Store locked up.
P501 Dispose of contents and container according to local regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: 4,4'-DDT

Other Designations: DDT; *p,p'*-DDT; 1,1'-(2,2,2-trichloroethylidene)bis(4-chlorobenzene); dicophane; 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane; alpha,alpha-bis(p-chlorophenyl)-beta,beta,beta-trichloroethane; pentachlorin; RCRA U061; C₁₄H₉Cl₅.

Components listed below are in compliance with OSHA's 29 CFR 1910.1200.

Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
4,4'-DDT	50-29-3	200-024-3	99.8

4. FIRST AID MEASURES

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin Contact: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eye Contact: Flush eyes with water for at least 15 minutes. Then get immediate medical attention.

Ingestion: If swallowed, drink plenty of water, do NOT induce vomiting. Get immediate medical attention. Induce vomiting only at the instructions of a physician. Do not give anything by mouth to unconscious or convulsive person.

Most Important Symptoms/Effects, Acute and Delayed: Organochlorine pesticides cause liver and kidney damage.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Slight fire hazard. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:

Suitable: Regular dry chemical, water, and regular foam.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 2 Fire = 1 Reactivity = 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Do not touch spilled material. Notify safety personnel of spills. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Isolate hazard area and deny entry. Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

7. HANDLING AND STORAGE

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances (See Section 10, "Stability and Reactivity").

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:

ACGIH (TLV): 1 mg/m³ (TWA)

NIOSH (REL): 0.5 mg/m³ (TWA)
500 mg/m³ (IDLH)

OSHA (PEL): 1 mg/m³ (TWA)
Prevent or reduce skin absorption.

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance

(physical state, color, etc.):

Molecular Formula:

Molar Mass (g/mol):

Odor:

Odor threshold:

pH:

Evaporation rate:

Melting point/freezing point:

Specific Gravity (water=1):

Vapor Pressure (mmHg):

Vapor Density (air = 1):

Viscosity (cP):

Solubility(ies):

Partition coefficient (n-octanol/water):

Particle Size:

4,4'-DDT

white crystalline solid

C₁₄H₉Cl₅

354.49

not available

not available

not available

not applicable

107 °C to 109 °C

(224.6 °F to 228.2 °F)

1.56 at 15 °C

not available

not applicable

not applicable

insoluble in water (0.12 ppm at 25 °C),

soluble in acetone, ether, pyridines, kerosene, benzene, carbon tetrachloride, dioxane, chloroform, and organic solvents

not available

not available

Thermal Stability Properties:	4,4' DDT
Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	260 °C (500 °F)
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers.

Incompatible Materials: Bases, combustible materials, metal salts, metals, and oxidizing materials.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce chlorides and oxides of carbon.

Hazardous Polymerization: Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: X Inhalation X Skin X Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Nausea, vomiting, diarrhea, stomach pain, and headache.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Same as ingestion if sufficient amounts are absorbed through the lungs.

Skin Contact: Same as ingestion if sufficient amounts are absorbed through the skin.

Eye Contact: May cause eye irritation.

Ingestion: Oral ingestion of food is the primary source of exposure for the general population. Acute and chronic ingestion was cause nausea, vomiting, diarrhea, stomach pain, headache, dizziness, disorientation, tingling sensation, kidney damage, liver damage, convulsions, coma, and death. 4,4'-DDT may cross the placenta and can be excreted in breast milk.

Numerical Measures of Toxicity:

Acute Toxicity: Category 3, Oral, Dermal

 Rat, Oral LD50: 87 mg/kg

 Rabbit, Dermal LD50: 300 mg/kg

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye Damage/Irritation: Not classified.

 Human, Eye: 423 mg/m³ for 1 h day for 6 d (irritation)

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Category 2

Listed as a Carcinogen/Potential Carcinogen X Yes No

 4,4'-DDT is listed by IARC as Group 2B (possibly carcinogenic to humans) and by NTP as *Reasonably Anticipated To Be A Human Carcinogen*. It is not listed by OSHA as a carcinogen/potential carcinogen.

 Tumorigenic effects: Rat, Oral TD: 438 mg/kg (2 years)

 Mutagenic effects: Human, 200 µg/L (72 h)

Reproductive Toxicity: Not classified; no data available.
Rat, Oral, TDLo: 430 mg/kg (pregnant 1 d to 21 d, 21 d).

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Category 1, prolonged or repeated exposure may damage the central nervous system.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data:

Fish Toxicity: Rainbow trout (*Oncorhynchus mykiss*) LC50 [static]: 1.25 µg/L to 3.59 µg/L (96 h)
Invertebrate: Water flea (*Daphnia magna*) LC50 [static]: 0.000 46 mg/L to 0.001 mg/L (48 h)

Persistence and Degradability: No data available.

Bioaccumulative Potential: BCF 1.17 species: fish.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U061.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: UN2761, Organochlorine pesticide, solid, n.o.s. (4,4'-DDT); Hazard class 6.1, PG III, Excepted Quantity: E1.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): 1 lb (0.454 kg) final RQ.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Section 313 (40 CFR 372.65): Not regulated.

OSHA Process Safety (29 CFR 1910.119): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	Yes.
CHRONIC HEALTH:	Yes.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:

California Proposition 65: WARNING! This product contains a chemical (4,4'-DDT) known to the state of California to cause cancer and reproductive/developmental effects.

U.S. TSCA Inventory: Listed.

TSCA 12(b), Export Notification: Section 5, 0.1 % de minimus concentration.

Canadian Regulations:

WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 28 May 2015

Sources: ChemADVISOR, Inc., SDS *Dichlorodiphenyltrichloroethane*, 20 March 2015.

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The reference values for this material are given in the NIST Report of Investigation.

Users of this RM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srmmsds@nist.gov; or via the Internet at <http://www.nist.gov/srm>.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: 4,4'-DDE

Other Designations: 1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene; dichlorodiphenyldichloroethylene; NCI-C00555; 2,2-bis(4-chlorophenyl)-1,1-dichloroethylene; Ethylene, 1,1-dichloro-2,2-bis(p-chlorophenyl)-; C₁₄H₈Cl₄.

Components listed below are in compliance with OSHA's 29 CFR 1910.1200.

Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
4,4'-DDE	72-55-9	200-784-6	99.8

4. FIRST AID MEASURES

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin Contact: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Eye Contact: Flush eyes with water for at least 15 minutes. Then get immediate medical attention.

Ingestion: Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

Most Important Symptoms/Effects, Acute and Delayed: Organochlorine pesticides cause liver and kidney damage.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Slight fire hazard. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:

Suitable: Regular dry chemical, carbon dioxide, water, and regular foam.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 1 Reactivity = 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Do not touch spilled material. Notify safety personnel of spills. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Isolate hazard area and deny entry. Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

7. HANDLING AND STORAGE

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances (See Section 10, "Stability and Reactivity").

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits: No occupational exposure limits have been established for 4,4'-DDE.

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance

(physical state, color, etc.):

Molecular Formula:

Molar Mass (g/mol):

Odor:

Odor threshold:

pH:

Evaporation rate:

Melting point/freezing point:

Specific Gravity (water=1):

Vapor Pressure (mmHg):

Vapor Density (air = 1):

Viscosity (cP):

Solubility(ies):

Partition coefficient (n-octanol/water):

Particle Size:

4,4'-DDE

white crystalline solid

C₁₄H₈Cl₄

318.03

not available

not available

not available

not applicable

88 °C to 90 °C

(191 °F to 194 °F)

not available

6.0 x 10⁻⁶

not applicable

not applicable

insoluble in water (0.12 ppm at 25 °C), ethanol, acetone, dichloromethane, fats, and organic solvents

not available

not available

Thermal Stability Properties:

Autoignition Temperature (°C):

Thermal Decomposition (°C):

Initial boiling point and boiling range (°C):

Explosive Limits, LEL (Volume %):

Explosive Limits, UEL (Volume %):

Flash Point (°C):

Flammability (solid, gas):

not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: Stable Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers.

Incompatible Materials: Bases, combustible materials, metal salts, metals, and oxidizing materials.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: Will Occur Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: Inhalation Skin Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Nausea, vomiting, diarrhea, stomach pain, and headache.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Same as ingestion if sufficient amounts are absorbed through the lungs.

Skin Contact: Same as ingestion if sufficient amounts are absorbed through the skin.

Eye Contact: No information available.

Ingestion: Oral ingestion of food is the primary source of exposure for the general population. Acute and chronic ingestion may cause nausea, vomiting, diarrhea, stomach pain, headache, dizziness, disorientation, tingling sensation, kidney damage, liver damage, convulsions, coma, and death. 4,4' DDE may cross the placenta and can be excreted in breast milk.

Numerical Measures of Toxicity:

Acute Toxicity: Category 4, Oral
Rat, Oral LD50: 850 mg/kg

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye Damage/Eye Irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Category 2

Listed as a Carcinogen/Potential Carcinogen Yes No
4,4'-DDE is listed by IARC as Group 2B (possibly carcinogenic to humans). It is not listed by NTP or OSHA as a carcinogen/potential carcinogen.

Tumorigenic effects: Mouse, Oral TD: 17 g/kg (78 weeks)

Mutagenic effects: Hamster, 20 mg/L

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data:

Fish Toxicity: Rainbow trout (*Oncorhynchus mykiss*) LC50 [static]: > 87 µg/L (24 h)
Bluegill (*Lepomis macrochirus*) LC50 [static]: 240 µg/L (96 h)

Persistence and Degradability: No data available.

Bioaccumulative Potential: BCF values of 27,500 to 81,000.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: This material is not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): 1 lb (0.454 kg) final RQ

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Section 313 (40 CFR 372.65): Not regulated.

OSHA Process Safety (29 CFR 1910.119): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	No.
CHRONIC HEALTH:	Yes.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:

California Proposition 65: WARNING! This product contains a chemical (4,4'-DDE) known to the state of California to cause cancer and reproductive/developmental effects.

U.S. TSCA Inventory: Listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:

WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 12 May 2015

Sources: ChemADVISOR, Inc., SDS 4,4'-DDE, 20 March 2015.

Hazardous Substances Data Bank (HSDB), National Library of Medicine's TOXNET system, *DDE CAS No. 72-55-9*; available at <http://toxnet.nlm.nih.gov> (accessed May 2015).

U.S. Environmental Protection Agency (EPA), Technology Transfer Network Air Toxics Web Site, *DDE*; available at <http://www.epa.gov/ttnatw01/hlthef/dde.html> (accessed May 2015).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The reference values for this material are given in the NIST Report of Investigation.

Users of this RM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srmmsds@nist.gov; or via the Internet at <http://www.nist.gov/srm>.

SAFETY DATA SHEET

1. SUBSTANCE AND SOURCE IDENTIFICATION

Product Identifier

SRM Number: 3068
SRM Name: Total Chlordane in Methanol
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is intended primarily for calibrating chromatographic instrumentation used for the determination of the certified mixture. Because of its miscibility with water, SRM 3068 can also be used to fortify aqueous samples with known amounts of chlordane. A unit of SRM 3068 consists of five 2-milliliter ampoules, each containing approximately 1.2 mL of technical chlordane in methanol.

Company Information

National Institute of Standards and Technology
 Standard Reference Materials Program
 100 Bureau Drive, Stop 2300
 Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
 FAX: 301-948-3730
 E-mail: SRMMSDS@nist.gov
 Website: <http://www.nist.gov/srm>

Emergency Telephone ChemTrec:
 1-800-424-9300 (North America)
 +1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Physical Hazard:	Flammable Liquid	Category 2
Health Hazard:	Acute Toxicity, Oral	Category 3
	Acute Toxicity, Inhalation	Category 3
	Acute Toxicity, Dermal	Category 3
	STOT - Single Exposure	Category 1

Label Elements
Symbol

Signal Word

Danger

Hazard Statement(s)

H225 Highly flammable liquid and vapor.
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
 H370 Causes damage to eyes, kidney, liver, heart, and central nervous system.

Precautionary Statement(s)

P210 Keep away from heat, sparks, open flames, and hot surfaces. — No smoking.
 P241 Use explosion-proof electrical, ventilating, lighting equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P260 Do not breathe dust, fumes, mists, vapors, or spray.
 P264 Wash hands thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves, protective clothing, and eye protection.

P301+P310 P330	If swallowed: Immediately call a doctor. Rinse mouth.
P303+P361+P353 P308+P311	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If exposed or concerned: Call a doctor.
P403+P235 P405	Store in a well-ventilated place. Keep cool. Store locked up.
P501	Dispose of contents and container according to local regulations.

Hazards Not Otherwise Classified: None.

Ingredients(s) with Unknown Acute Toxicity: None.

3. COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

Substance: Methanol

Other Designations: Methyl alcohol; wood alcohol; methyl hydroxide; wood spirit; wood naphtha.

The health and safety information included in this SDS is for methanol, the main component. This material, a mixture of methanol containing trace amounts of chlordane (Chemical Abstracts Registry Number 12789-03-6) has not been tested as a whole. The concentration of chlordane in is below the reportable limits for hazardous components (1 %) and/or carcinogens (0.1 %), as required by OSHA, 29 CFR 1910.1200, for SDS information. For the actual values, see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Methanol	67-56-1	200-659-6	>99.9

4. FIRST AID MEASURES

Description of First Aid Measures

Inhalation: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

Skin Contact: Rinse affected skin with water for at least 15 minutes, then wash thoroughly with soap or mild detergent and water. If skin irritation persists, seek medical aid and bring the container or label.

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

Ingestion: If a large amount is swallowed, get medical attention.

Most Important Symptoms/Effects, Acute and Delayed: Skin irritation, eye irritation, central nervous system depression, and nerve damage. May cause blindness.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek immediate medical attention.

5. FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Severe fire hazard. Vapor/air mixtures are explosive above the flash point. Vapors or gases may ignite at distant ignition sources and flash back. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media

Suitable: Regular dry chemical, carbon dioxide, water, or alcohol-resistant foam.

Unsuitable: None listed.

Specific Hazards Arising from the Chemical: Not applicable.

Special Protective Equipment and Precautions for Fire-Fighters: Move container from fire area if it can be done without personal risk. Avoid inhalation of material or combustion by-products. Wear full protective clothing and NIOSH-approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 2 Fire = 3 Reactivity = 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Use suitable protective equipment; see Section 8, “Exposure Controls and Personal Protection”. Keep out of waters supplies and sewers.

Methods and Materials for Containment and Clean up: Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk, with water spray to reduce vapors. Absorb spilled material with sand or non-combustible material and collect in appropriate container for disposal.

7. HANDLING AND STORAGE

Safe Handling Precautions: Handle glass ampoules with care. See Section 8, “Exposure Controls and Personal Protection”.

Storage and Incompatible Materials: Store in a well-ventilated area. Keep separated from incompatible substances (See Section 10, “Stability and Reactivity”).

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits

Methanol:

OSHA (PEL): 260 mg/m³; 200 ppm TWA

ACGIH (TLV): 200 ppm TWA

250 ppm STEL

Skin – potential significant contribution to overall exposure by the cutaneous route.

NIOSH (REL): 260 mg/m³; 200 ppm TWA

325 mg/m³; 250 ppm STEL

6000 ppm IDLH

Potential for dermal absorption.

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection Measures: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye Protection: Splash resistant safety goggles and emergency eyewash are recommended.

Skin and Body Protection: Chemical resistant clothing and gloves are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties

Methanol (>99.9 % of this SRM)

Molar Mass (g/mol)	32.04
Molecular Formula	CH ₃ OH
Appearance (physical state, color, etc.)	clear, colorless liquid
Odor	alcohol odor
Odor threshold	100 ppm
pH	not available
Evaporation rate (butyl acetate = 1)	4.6
Melting point/freezing point	-94 °C (-137 °F)
Relative Density as Specific Gravity (water = 1)	0.7914
Density	not available
Vapor Pressure	97.25 mmHg at 20 °C
Vapor Density (air = 1)	1.11
Viscosity	0.59 cP at 20 °C
Solubilities	soluble in water solvent: ether, benzene, acetone, chloroform, ethanol, ketones, organic solvents
Partition coefficient (n-octanol/water)	not available

Thermal Stability Properties

Autoignition Temperature	385 °C (725 °F)
Thermal Decomposition	not available
Initial boiling point and boiling range	65 °C (149 °F)
Explosive Limits, LEL (Volume %)	6
Explosive Limits, UEL (Volume %)	36
Flash Point (Closed Cup)	11 °C (51.8 °F)
Flammability (solid, gas)	not applicable

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable Unstable

Possible Hazardous Reactions: Not applicable.

Conditions to Avoid: Avoid heat, flames, sparks, and other sources of ignition. Minimize contact with material. Avoid inhalation of material or combustion by-products. Keep out of water supplies and sewers.

Incompatible Materials: Halo carbons, combustible materials, metals, oxidizing materials, halogens, metal carbide, bases, acids, and amines.

Hazardous Decomposition: Oxides of carbon.

Hazardous Polymerization: Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: X Inhalation X Skin X Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Skin irritation, eye irritation, central nervous system depression, and nerve damage. May cause blindness.

Potential Health Effects (Acute, Chronic, and Delayed)

Inhalation: Acute and chronic exposure may cause irritation, cough, ringing in the ears, constipation, headache, drowsiness, dizziness, tingling sensation, pain in extremities, tremors, loss of coordination, blood disorders, and nerve damage. Chronic exposure may also cause sensitivity to light, changes in blood pressure, digestive issues, difficulty breathing, irregular heartbeat, visual disturbances, blindness, bluish skin color, lung congestion, heart damage, kidney damage, liver damage, reproductive effects, effects on the brain, convulsions, unconsciousness, and coma.

Skin Contact: Acute and chronic exposure may result in irritation, absorption may occur, headache, drowsiness, loss of coordination, blood disorders, and nerve damage.

Eye Contact: Acute and chronic exposure may cause irritation; acute may cause eye damage.

Ingestion: Acute and chronic exposure may cause the same effects as listed for inhalation.

Numerical Measures of Toxicity

Acute Toxicity: Category 3 for Oral, Inhalation, and Dermal.

Methanol: Human, Oral, LDLo: 143 mg/kg

Rat, Oral, LD50: 5628 mg/kg

Rat, Inhalation, LC50: 83.2 mg/L (4 h); 145 000 ppm (1 h); 64 000 ppm (4 h)

Rabbit, Dermal, LD50: 15 800 mg/kg

Skin Corrosion/Irritation: Not classified.

Methanol: Rabbit, Skin: 20 mg (24 h) moderate

Serious Eye Damage/Eye Irritation: Not classified.

Methanol: Rabbit, Eyes: 100 mg (24 h) moderate; 40 mg moderate

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen Yes X No
Methanol is not listed by IARC, NTP, or OSHA as a carcinogen/potential carcinogen.

Methanol: Tumorigenic: Rat, Inhalation, TCLo: 1000 ppm (2 years)

Mutagenic: Mouse, Oral TD: 1 g/kg (cytogenetic analysis)

Rat, Oral TD: 10 µmol/kg (DNA damage)

Human, lymphocyte TC: 300 mmol/L (DNA inhibition)

Reproductive Toxicity: Not classified.

Methanol: Rat Inhalation TCLo: 5000 ppm (pregnant 7 d to 17 d)

Rat Oral TDLo: 6000 mg/kg (pregnant 15 d to 17 d)

Specific Target Organ Toxicity, Single Exposure: Category 1, Causes damage to central nervous system.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data

Methanol:

Fish, Bluegill, (*Lepomis macrochirus*), LC50: 13 500 mg/L to 17 600 mg/L (96 h) flow-through

Fish, Fathead minnow (*Pimephales promelas*), LC50: 28 200 mg/ L (96 h) flow-through

Fish, Fathead minnow (*Pimephales promelas*), LC50: >100 mg/L (96 h) static

Persistence and Degradability: No data available.

Bioaccumulative Potential: <10 species: fish.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose in accordance with all applicable federal, state, and local regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U154.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: UN1230, Methanol, Hazard Class 3, 6.1, Packing Group II.

15. REGULATORY INFORMATION

U.S. Regulations

CERCLA Sections 102a/103 (40 CFR 302.4): 5000 lbs (2270 kg) final RQ.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Section 313 (40 CFR 372.65): 1.0 % de minimis concentrations.

OSHA Process Safety (29 CFR 1910.119): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH: Yes

CHRONIC HEALTH: Yes

FIRE: Yes

REACTIVE: No

PRESSURE: No

State Regulations: California Proposition 65: WARNING! This product contains a chemical (methanol) known to the state of California to cause reproductive/developmental effects.

U.S. TSCA Inventory: Methanol is listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations: WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 05 May 2015

Sources: ChemADVISOR, Inc., SDS *Methyl Alcohol*, 20 March 2015.

CDC, NIOSH, *Methanol*, RTECS# *PC1400000*, CAS No. *67-56-1*; available at <http://www.cdc.gov/niosh-rtecs/PC155CC0.html> (accessed May 2015).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration	STEL	Short Term Exposure Limit
LD50	Median Lethal Dose or Lethal Dose, 50 %	STOT	Specific Target Organ Toxicity
LEL	Lower Explosive Limit	TLV	Threshold Limit Value
MSDS	Material Safety Data Sheet	TPQ	Threshold Planning Quantity
NFPA	National Fire Protection Association	TSCA	Toxic Substances Control Act
NIOSH	National Institute for Occupational Safety and Health	TWA	Time Weighted Average
NIST	National Institute of Standards and Technology	UEL	Upper Explosive Limit
n.o.s.	Not Otherwise Specified	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srmmsds@nist.gov; or via the Internet at <http://www.nist.gov/srm>.

APPENDIX C
List of Approved Amendments/changes
HASP Acknowledgement/Agreement Form
Visitors Log



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630



Edmund G. Brown Jr.
Governor

June 14, 2017

Ms. Lisa Cline
Deputy Superintendent
Business and Fiscal Services
1051 South A Street
Oxnard, California 93030

APPROVAL OF SOIL MANAGEMENT PLAN – PROPOSED NEW ELEMENTARY AND MIDDLE SCHOOLS, SOUTHEAST CORNER OF DORIS AVENUE AND PATTERSON ROAD, OXNARD, CALIFORNIA (SITE CODE: 304663)

Dear Ms. Cline:

The Department of Toxic Substances Control (DTSC) reviewed the Revised Soil Management Plan (SMP) prepared by ATC Group Services LLC on behalf of the Oxnard School District (District), dated May 17, 2017 and received electronically on May 22, 2017. The Revised SMP was prepared in response to DTSC comments on the draft version forwarded in a letter dated May 12, 2017. The SMP summarizes the background and environmental investigations, and presents measures to mitigate potential risks to human health and the environment in the event of future construction and/or land improvement activities at the proposed new elementary and middle schools site (Site).

According to the Preliminary Endangerment Assessment (PEA) report, dated April 14, 2017, the proposed 25-acre school site is located at the southeast corner of Doris Avenue and Patterson Road in the City of Oxnard, California. According to the Phase I Environmental Site Assessment, the area was used for agriculture from 1940 to the present. A closed Leaking Underground Storage Tank (LUST) site is located approximately 2,000 feet east of the site, which received regulatory closure in 1998. A plugged and inactive oil well is located approximately 475 feet south of the Site. The Site is bordered by residential development on the north, and agricultural land on the east, west, and north. To evaluate the impact from residual agricultural chemicals and the off-site oil well, the Site was investigated for organochlorine pesticides (OCPs) and metals in soil, and methane and hydrogen sulfide in soil gas.

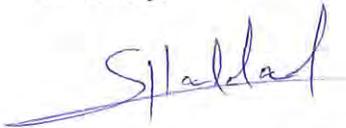
Ms. Lisa Cline
June 14, 2017
Page 2

Based on information presented in the PEA, toxaphene was the only constituent detected at concentrations in excess of the risk screening levels. Risk screening evaluation, using school-based scenario, indicates that the Site does not pose a significant risk to students and staff and is suitable for use as a school. Risk screening, using residential-based scenario, indicates potential risk to future residents. The PEA Report recommends a land use covenant (LUC) to limit the Site's future use to non-residential purposes, along with SMP. DTSC approved the PEA on May 4, 2017.

DTSC comments have been adequately addressed and the SMP is hereby approved. If site conditions differ from those presented in the approved SMP or PEA, additional measures may be necessary. Please notify DTSC within 48 hours if contaminated soil is encountered during construction.

If you have any questions regarding this project, please contact Xihong Scarlett Zhai, Project Manager, at (714) 484-5316 or by e-mail at Xihong.Zhai@dtsc.ca.gov, or contact me at (714) 484-5368 or by e-mail at Shahir.Haddad@dtsc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Shahir Haddad", with a long horizontal flourish extending to the left.

Shahir Haddad, P.E.
Supervising Engineer
Brownfields Restoration and School Evaluation Branch
Brownfields and Environmental Restoration Program

kl/xsz/sh

cc: See next page.

Ms. Lisa Cline
June 14, 2017
Page 3

cc: (via e-mail)

Patricia Raphael Garcia
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Brownfields Restoration and School Evaluation Branch Reading File

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT
DORIS PATTERSON NEW ACADEMY SITE ACQUISITION
OXNARD SCHOOL DISTRICT
OXNARD, CALIFORNIA**

PREPARED FOR:
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March 27, 2015
Project No. 209348001

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Ms. Lisa Williams
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Subject: Phase I Environmental Site Assessment
Doris Patterson New Academy Site Acquisition
Oxnard School District
Oxnard, California

Dear Ms. Williams:

In general accordance with your authorization dated February 20, 2015 and the scope of services outlined in our Proposal No. P-16466 dated June 18, 2014. Ninyo & Moore has performed a Phase I Environmental Site Assessment of the above-referenced site. The attached report presents our methodology, findings, opinions, and conclusions regarding the environmental conditions at the site. We appreciate the opportunity to be of service to you on this project.

We appreciate the opportunity to be of continued service to you on this project.

Sincerely,
NINYO & MOORE



Patrick Cullip
Senior Staff Engineer



Summer Hansen-Rooks
Project Environmental Scientist



John Jay Roberts, PG, CEG
Senior Geologist



PJC/SJH/JJR/lr/sc

Distribution: (1) Addressee (via e-mail)

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EXECUTIVE SUMMARY

Ninyo & Moore conducted a Phase I Environmental Site Assessment (ESA) of the property at the southeast corner of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California (site; Figure 1). Ninyo & Moore was contracted by LSA Associates, Inc. (LSA) to conduct this assessment in general accordance with our proposal dated February 20, 2015. Historical research, document review, and site assessment activities were conducted in February and March 2015. The Oxnard School District (District) is considering acquisition of the site for a school. Therefore, this Phase I ESA includes the evaluation of additional possible conditions in accordance with Sections 17210-17213 and 17251 of the California Education Code (CEC); Title 5, Sections 14010, 14011, and 14012 of the California Code of Regulations; Assembly Bill (AB) 2644 and with the California Department of Education's (CDE) School Site Selection and Approval Guide (CDE, 2000).

In general, the following items were noted:

- The site is at the southeast corner of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California, and is identified as Ventura County Assessors' Parcel Number (APN) 183-0-070-090. The site is currently owned by the Joan Henson Margaret M Anderson Ralph Borchard Jr Trustee. The site is occupied by Borchard Ranch, and is used for agricultural purposes. The site consists of a rectangular-shaped parcel totaling approximately 20 acres.
- Historical records reviewed by Ninyo & Moore indicated the site was agricultural land from at least 1938 to the time of this report. Due to the agricultural land use, the site was likely applied with commercial pesticides and/or herbicides. This represents a recognized environmental condition (REC) for the site.
- Hazardous substances, underground storage tanks (USTs), aboveground storage tanks (ASTs), evidence of releases, and other environmental issues were not identified on the site during the site reconnaissance.
- The site was not listed on searched environmental databases.
- To date, the key site manager, Southern California Edison, Southern California Gas Company, the County of Ventura, and the City of Oxnard have not yet responded to our requests to review records or acquire information for the site. The user questionnaire was not returned to us at the time of this publication. These are considered data gaps. If information

from these agencies alters the conclusions and recommendations of this report, an addendum will be prepared.

- Based on the completion of the Vapor Encroachment Screening Matrix, it is unlikely that a vapor encroachment condition currently exists beneath the site.
- Potential off-site sources of environmental concern were not identified in the immediate site vicinity.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the 20-acre property on the southeast corner of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of RECs in connection with the property except for the following:

- The current and historic agricultural land use of the site represents a REC.

Ninyo & Moore recommends a subsurface investigation to evaluate the REC.

1. INTRODUCTION

Ninyo & Moore conducted a Phase I Environmental Site Assessment (ESA) of the 20-acre property southeast of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California (site; Figure 1). Ninyo & Moore was contracted by LSA Associates, Inc. (LSA) to conduct this assessment in general accordance with their authorization dated February 20, 2015 and our proposal dated June 18, 2014. The following sections identify the purpose, the involved parties, the scope of services, and the limitations and exceptions associated with this Phase I ESA.

1.1. Purpose

The objective of the Phase I ESA is to evaluate, in general accordance with the process described in ASTM International (ASTM) Practice E1527-13, recognized environmental conditions (RECs), which are defined by ASTM as “the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The Oxnard School District (District) is considering acquisition of the site for a school. Therefore, this Phase I ESA includes the evaluation of additional possible conditions in accordance with Sections 17210-17213 and 17251 of the California Education Code (CEC); Title 5, Sections 14010, 14011, and 14012 of the California Code of Regulations; Assembly Bill (AB) 2644 and with the California Department of Education’s (CDE) School Site Selection and Approval Guide (CDE, 2000).

As defined in ASTM E1527-13, de minimis conditions are not considered RECs. A de minimis condition is defined as “a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.”

Identification of RECs fall into three categories: existing RECs (as defined above); Historical RECs (HRECs); or Controlled RECs (CRECs).

- HREC – A HREC is defined as “a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls).”
- CREC – A CREC is defined as “recognized environmental conditions resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, AULs, institutional controls, or engineering controls).”

1.2. Involved Parties

Mr. Patrick Cullip of Ninyo & Moore conducted the site reconnaissance on March 13, 2015. Mr. Cullip also performed regulatory inquiries, historical research, document review, and completed the report. Ms. Summer Hansen-Rooks of Ninyo & Moore performed project oversight and quality review. Mr. John Jay Roberts of Ninyo & Moore conducted the senior quality review for this project. Resumes of professionals that conducted this Phase I ESA are presented in Appendix G. The Phase I ESA was prepared for LSA.

1.3. Scope of Services

Ninyo & Moore’s scope of services for this Phase I ESA included the following:

- Review of available federal, state, and local regulatory agency database for the site and for properties located within the ASTM International (ASTM) recommended search radius of the site. The purpose of this review is to evaluate possible environmental impacts to the subject site. Databases will identify locations of known hazardous waste sites, landfills, and leaking underground storage tanks, permitted facilities that utilize aboveground or underground storage tanks, and facilities that used, stored, or disposed hazardous materials.
- Conduct interviews with the property owner and/or manager(s) and contiguous property owners, as available, regarding the environmental status of the site.
- Perform a site and vicinity reconnaissance to visually identify areas of possibly contaminated surficial soil or surface water, improperly stored hazardous materials,

suspect asbestos-containing materials, suspect lead-based paint, possible sources of polychlorinated biphenyls, and possible risk of contamination from activities at the site and adjacent or nearby properties.

- Perform a site vicinity reconnaissance from public right-of-way for aboveground storage tanks, including propane tanks within 1,500 feet of the site.
- Request the local Air Quality Management District to evaluate properties within ¼ mile of the site for possible activities that may reasonably be anticipated to have hazardous air emissions.
- Request the State Fire Marshal's office to evaluate the possible presence of underground hazardous materials-conveying pipelines within 1,500 feet of the site.
- Review the city utility maps for information on high pressure natural gas lines and electric transmission lines on or within 1,500 feet of the site.
- Meet with and/or review files from appropriate state and local regulatory agencies having files or information relative to the site. Requests were made to the Ventura County Department of Health Services, the local Air Quality Management District, the Ventura County Fire Department, the Los Angeles Regional Water Quality Control Board, and the DTSC.
- Review readily available historical resources, including, aerial photographs, city directories, and fire insurance maps of the site and vicinity.
- Review the site specific and regional geology and hydrogeology. Specific information that were obtained includes depth to groundwater, groundwater gradient and flow direction, and regional groundwater quality. This type of information is used to evaluate the likelihood that off-site sources of hazardous materials have impacted the soil and groundwater beneath the site.
- Review available land title reports and maps provided by the District pertaining to the site.
- Review readily available maps and reports pertaining to the environmental condition of the site.
- Review topographic maps for railroads within 1,500 of the site.
- Identify the presence of freeways and other busy corridors within 500 feet of the site.
- Identify the presence of airport facilities or airport master plan facilities within two nautical miles of the site.

- Prepare a Phase I ESA report documenting findings and providing opinions and recommendations regarding possible environmental impacts at the site. Report language will be such as to satisfy ASTM, All Appropriate Inquiries (AAI), and CDE requirements.

1.4. Limitations and Exceptions

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

The findings, opinions, and conclusions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject property or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control. Ninyo & Moore cannot warrant or guarantee that not finding indicators of any particular hazardous material means that this particular hazardous material or any other hazardous materials do not exist on the site. Additional research, including invasive testing, can reduce the uncertainty, but no techniques now commonly employed can eliminate the uncertainty altogether.

1.5. Special Terms and Conditions

This study did not include an evaluation of geotechnical conditions or potential geologic hazards. In addition, as indicated in Section 13.1.5 of ASTM E 1527-13, the following, which is not intended to be all inclusive, represents out-of-scope items with respect to a

Phase I ESA and, therefore, were not addressed: asbestos-containing materials, lead-based paint, lead in drinking water, regulatory compliance, cultural and historic risk, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, biological agents and mold. Furthermore, Ninyo & Moore did not address interpretations of zoning regulations, building code requirements, or property title issues.

1.6. User Reliance

This report may be relied upon by, and is intended exclusively for LSA. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than these is undertaken at said parties' sole risk.

1.7. Physical Limitations

Physical limitations were not encountered during the site reconnaissance.

1.8. Data Gaps

To date, the key site manager, Southern California Edison (SCE), Southern California Gas Company (SCGC), County of Ventura, and City of Oxnard have not yet responded to our requests to review files or acquire information for the site. The user questionnaire was not returned to us at the time of this publication. If information from these agencies alters the conclusions and recommendations of this report, an addendum will be prepared.

2. SITE DESCRIPTION

The following sections describe the location of the site, general characteristics and current uses of the site, the structures present at the site, the occupants of the site, the heating and cooling systems utilized in the site buildings, the sewage disposal system, and the potable water provider for the site. The current uses of adjacent properties are also described. A site location map is presented as Figure 1. An aerial photograph depicting the site and vicinity is presented as Figure 2. Photographs of the site taken during the site reconnaissance are presented in Appendix A.

2.1. Location and Description

The site is southeast of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California, and is identified as a portion of Ventura County Assessor's Parcel Number (APN) 183-0-070-090. According to the EDR Environmental LienSearch™ report (EDR, 2015a), the current legal owner of the property is the "Joan Henson Margaret M Anderson Ralph Borchard Jr Trustee."

2.2. General Site Characteristics

The site consists of a rectangular-shaped parcel totaling approximately 20 acres.

2.2.1. Site Description

The site is developed with an agricultural field.

2.2.2. Occupants

The site is occupied by Mr. Scott Hiji, a tenant, who uses the site for agricultural purposes. Structures were not observed within the boundaries of the subject site at the time of the reconnaissance.

2.2.3. Roads

As shown on Figure 2, the site is bound to the north by Doris Avenue and to the west by North Patterson Road. Dirt access roads border the site to the south and east. Roads were not observed on the site at the time of the site reconnaissance.

2.2.4. Heating and Cooling Systems

Heating and cooling systems were not observed on the site at the time of the site reconnaissance. Heating and cooling in the site vicinity are powered by natural gas and electricity, which are supplied to the site vicinity by the SCGC and SCE, respectively.

2.2.5. Sewage Disposal/Septic Systems

Sewage disposal in the site vicinity is serviced by the City of Oxnard.

2.2.6. Potable Water

Water is provided to the site by the City of Oxnard.

2.3. Adjoining Properties

Table 1 lists the properties adjoining the site and associated land use. The general site surrounding includes commercial and residential properties. Based on the nature of the adjacent properties and observations made during our site reconnaissance, it is unlikely that these properties have impacted the environmental integrity of the site.

Table 1 – Adjoining Properties

Location	Current Occupant(s)
North	Doris Avenue, beyond which are residential properties
South	Dirt access road, beyond which is agricultural land
East	Agricultural land
West	North Patterson Road, beyond which is agricultural land

3. USER PROVIDED INFORMATION

The following sections summarize information provided by the user to assist the environmental professional in identifying the possibility of RECs in connection with the site, and to fulfill the user's responsibilities in accordance with Section 6 of ASTM Practice E 1527-13. The user questionnaire was submitted for completion but not returned to us at the time of this publication. This is considered a data gap.

3.1. Current Title Information

Title records were not provided to Ninyo & Moore by the user.

3.2. Environmental Liens or Activity and Use Limitations (AULs)

An environmental liens search was completed by EDR dated February 25, 2015. According to the EDR Environmental LienSearch™ report, environmental liens or other AULs were not found for the site address. A copy of the EDR Environmental LienSearch™ report is included in Appendix C.

3.3. Specialized Knowledge

Specialized knowledge regarding the site was not provided to Ninyo & Moore.

3.4. Commonly Known or Reasonably Ascertainable Information

Commonly known or reasonably ascertainable information pertaining to the site that is material to RECs in connection with the site was not noted by Ninyo & Moore, or communicated to us in writing, in person, or during phone conversations for purposes of this assessment.

3.5. Valuation Reduction for Environmental Issues

Information regarding valuation reduction for environmental issues was not provided to Ninyo & Moore.

3.6. Other User Provided Information

Other information regarding the environmental condition of the site was not provided to Ninyo & Moore.

4. PHYSICAL SETTING

The following sections include discussions of topographic, geologic, hydrogeologic conditions, and wetlands characterization in the vicinity of the site, based upon our document review and our visual reconnaissance of the site and adjacent areas.

4.1. Topographic Conditions

Based on a review of the US Geological Survey (USGS), 7.5-Minute Topographic Quadrangle Map Series, Oxnard, California, 1949 photorevised 1967, the site is situated at an elevation of approximately 40 to 45 feet above mean sea level (USGS, 1949).

4.2. Geologic and Soil Conditions

According to the EDR Radius Map Report (Section 6), the stratigraphic units underlying the site are Cenozoic era, Quaternary system, and Quaternary series in a stratified sequence. The dominant soil class at the site is of the Camarillo component with a loam texture. The soil is classified as a Class C hydrologic group with slow infiltration rates due to soil layers

impeding downward movement of water, or soils with moderately fine or fine textures. Soil classifications include loam from 0 to 24 inches (silts and clays), stratified sandy loam to sandy clay loam from 24 to 50 inches (silts and clays), and fine sand from 50 to 79 inches (sands and silty sands).

4.3. Site Hydrology

The following sections discuss the site hydrology in terms of surface water and groundwater.

4.3.1. Surface Waters

There are three freshwater ponds approximately 0.90 mile north of the site at the River Ridge Golf Club. Other natural surface water bodies, including ponds, streams, or other bodies of water, were not present within one mile of the site.

4.3.2. Wetlands

Based on information obtained from the U.S. Fish and Wildlife Service webpage (<http://www.fws.gov/wetlands/data/Mapper.html>), there are several wetlands bordering agricultural properties within one mile of the site. Wetlands were not present on the site.

4.3.3. Groundwater

Groundwater information for the site was not readily available. According to the State Water Resources Control Board (SWRCB) GeoTracker website (geotracker.swrcb.ca.gov), groundwater monitoring was conducted at the former Fremont Cleaners at 690 North Ventura Road, approximately 0.60 mile east and up to cross-gradient of the site. Depth to groundwater ranged from 14.5 to 19.7 feet below ground surface (bgs) in the shallow zone and 37.8 to 38.8 feet bgs in the deeper zone in January 2015. The groundwater gradient was determined to flow to the northwest (Turner Maclane, Inc., 2015).

Groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors.

4.3.4. Radon

Based on the results of a California statewide radon survey conducted in 2010 by the California Department of Health Services, the possibility that high levels of radon exist at the site is considered to be low. Radon concentrations at, or above, 4 picocuries per liter (pCi/l) are considered to be of environmental concern to Cal-EPA and EPA. Based on the statewide survey, 38 tests for radon were analyzed within the zip code in which the site is located (93030). One test returned results with radon concentrations of 4 pCi/l or higher. Radon testing was not performed at the site and was beyond the scope of services for this Phase I ESA.

5. HISTORICAL USE INFORMATION

Ninyo & Moore conducted a historical record search for both the site and surrounding areas. This review included one or more of the following sources that were found to be both reasonably ascertainable and useful for the purposes of this Phase I ESA: historical aerial photographs, historical fire insurance maps, historical city directories, building permits, topographic maps, and zoning/land use records. The following table lists the historical data types reviewed for this Phase I ESA, their source, their respective dates, and data failures encountered during our review, if any.

Source

Data Type	Data Type	Source Dates	Data Limitation
Historical Aerial Photographs	EDR Historical Aerial Decade Package	1938-2012	None
Certified Sanborn Fire Insurance Maps	EDR Certified Sanborn Report	None Available	None
City Directories	EDR City Directory Abstract	1926-2013	No listings for the site.
Building records	County of Ventura	N/A	N/A
Topographic Maps	EDR Historical Topographic Map Report	1904-1967	None
Note: EDR – Environmental Data Resources, Inc. N/A – Not Applicable			

Historical records reviewed by Ninyo & Moore indicated the site was agricultural land from at least 1938 to 2012.

Although one or more of the sources listed above provided limited information with regards to the historical use of the site, the information gathered from the sources reviewed as a whole is adequate to develop a history of the previous uses of the site and the surrounding area in accordance with Section 8.3 of ASTM Practice E 1527-13.

5.1. Historical Aerial Photographs

Historical aerial photographs dated 1938 to 2012 were provided by EDR. Table 2 presents a summary of our review. Historical aerial photographs are provided in Appendix D.

Table 2 – Aerial Photograph Review

Photograph Date	Subject Property	Site Vicinity	
1938	The site appeared developed as agricultural land.	North	Doris Avenue appeared, beyond which was agricultural land. Residential structures appeared northeast of the site.
		South	Agricultural land.
		East	
		West	North Patterson Road appeared, beyond which was agricultural land.
1947	The site appeared similar to that observed in the 1938 aerial photograph.	North	The site vicinity appeared similar to that observed in the 1938 aerial photograph.
		South	
		East	
		West	
1953	The site appeared similar to that observed in the 1947 aerial photograph.	North	The site vicinity appeared similar to that observed in the 1947 aerial photograph.
		South	Oxnard Airport appeared developed.
		East	The site vicinity appeared similar to that observed in the 1947 aerial photograph.
		West	
1959, 1967	The site appeared similar to that observed in the 1953 aerial photograph.	North	The site vicinity appeared similar to that observed in the 1953 aerial photograph.
		South	
		East	
		West	
1977	The site appeared similar to that observed in the 1953 aerial photograph.	North	The residential structures northeast of the site appeared as vacant land.
		South	The site vicinity appeared similar to that observed in the 1953 aerial photograph.
		East	
		West	
1985	The site appeared similar to that observed in the 1977 aerial photograph.	North	Residential properties appeared.
		South	The site vicinity appeared similar to that observed in the 1977 aerial photograph.
		East	
		West	

Table 2 – Aerial Photograph Review

Photograph Date	Subject Property	Site Vicinity	
1994	The site appeared similar to that observed in the 1985 aerial photograph.	North	Additional residential properties.
		South	The site vicinity appeared similar to that observed in the 1985 aerial photograph.
		East	
		West	
2005, 2009, 2010	The site appeared similar to that observed in the 1994 aerial photograph.	North	The site vicinity appeared similar to that observed in the 1994 aerial photograph.
		South	
		East	
		West	
2012	The site appeared similar to that observed during the time of the site reconnaissance.	North	The site vicinity appeared similar to that observed during the time of the site reconnaissance.
		South	
		East	
		West	

Based on Ninyo & Moore’s review of historical aerial photographs, the site was agricultural land from at least 1938 to 2012. Due to the agricultural land use, the site was likely applied with commercial pesticides and/or herbicides. This represents a REC for the site.

Historical aerial photographs showing the site prior to its development in 1938 were not readily available. However, based on Ninyo & Moore’s experience, it is probable the site was either vacant or agricultural land prior to its historical use. Therefore, Ninyo & Moore does not consider this data gap significant and did not impact Ninyo & Moore’s ability to identify RECs at the site.

5.2. Sanborn Fire Insurance Rate Maps

Ninyo & Moore requested Sanborn Fire Insurance Rate Maps from EDR. According to EDR, Sanborn maps do not exist for the site vicinity. The Sanborn Map Report can be found in Appendix D.

5.3. Oil and Gas Maps

According to the State of California, Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder website, active or abandoned oil wells are not present on the site. Several oil wells are present within a 1-mile radius of the site. The nearest oil well, “Richfield-Doheny Ox. Airport” 1, is a plugged and inactive active oil well

approximately 475 feet south and up to cross-gradient of the site. The site lies within the boundaries of the Montalvo, West oil field. The wells identified within a mile of the site do not represent a REC or indicator of a REC for the site. The Montalvo, West oil field is further discussed in Section 7.20.

5.4. City Directories

Ninyo & Moore reviewed the EDR Historical City Directory Abstract which included information from select historical city directories for the years 1926 through 2013. The site was not listed in city directories. City directories are provided in Appendix D.

5.5. Historical Chain-of-Ownership Records

A historical chain-of-ownership report was not provided by the client for review by Ninyo & Moore for this Phase I ESA.

5.6. Building Permits

A request was sent to the City of Oxnard Building and Engineering Services (BES) on March 12, 2015 for building permits associated with the site APN. The BES referred Ninyo & Moore to the County of Ventura, stating the site is not under their jurisdiction. A request was sent to the County of Ventura on March 24, 2015 for building permit records. To date, the County of Ventura has not responded to our request to review building records. This is considered a data gap. If information from the County of Ventura alters the conclusions and recommendations of this report, an addendum will be prepared.

5.7. Historical Topographic Maps

Historical topographic maps were provided by EDR and dated 1904, 1910, 1947, 1951, and 1949 photorevised 1967. Structures were not depicted on the site in the historical topographic maps reviewed. North Patterson Road appeared developed by 1904, and Doris Avenue appeared developed by 1947. A copy of the EDR Historical Topographic Map Report is included in Appendix D.

5.8. Previous Report and Documents

A Phase I ESA of the property, prepared by Cardno ATC and dated March 5, 2014, was provided by the client to Ninyo & Moore for review. According to the report, the site was used historically and currently (at the time of their report) for agricultural use. Cardno ATC identified the past use of pesticides as a REC “based on the fact that future development of the property includes a planned school site.” Significant data gaps were not identified. Cardno ATC recommended a subsurface investigation to sample for pesticides and arsenic at the site.

6. ENVIRONMENTAL DATABASE REPORT REVIEW

EDR performed a computerized environmental information database search on February 24, 2015 (Appendix E). The EDR report included federal, state, and local databases. The following paragraphs describe the databases that contain noted properties of environmental concern, and include a discussion of the regulatory status of the facilities and potential environmental impact to the subject site. According to GeoTracker, groundwater in the site vicinity is estimated from 14.5 to 19.7 feet below ground surface (bgs) in the shallow zone and 37.8 to 38.8 feet bgs in the deeper zone. Groundwater in the site vicinity is expected to flow generally to the northwest.

6.1. National Priorities List (NPL): Distance Searched – 1 mile

The NPL is the EPA database of uncontrolled or abandoned hazardous waste properties listed for priority remedial actions under the Superfund program.

Neither the site nor properties located within the searched distance were listed on this database.

6.2. Proposed and Delisted National Priorities List (NPL): Distance Searched – ½ mile

The Proposed NPL database lists properties that are currently being evaluated for priority remedial actions for the Superfund program. The Delisted NPL database includes properties that are deleted from the NPL database based upon the National Oil and Hazardous

Substances Pollution Contingency Plan. This deletion takes place after no further response to the NPL is appropriate.

Neither the site nor properties located within the searched distance were listed on either database.

6.3. Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List: Distance Searched – ½ mile

The CERCLIS database contains properties which are either proposed or on the NPL and properties which are in the screening and assessment phase for possible inclusion on the NPL.

Neither the site nor properties located within the searched distance were listed on this database.

6.4. CERCLIS/No Further Remedial Action Planned (NFRAP) List: Distance Searched – ½ mile

CERCLIS sites designated as NFRAP have been removed from the CERCLIS database following an initial investigation where no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

Neither the site nor properties located within the searched distance were listed on this database.

6.5. Corrective Action Report (CORRACTS): Distance Searched – 1 mile

The EPA maintains this database of Resource Conservation and Recovery Act (RCRA) facilities that are undergoing corrective action. A corrective action order is issued when a release of hazardous waste or constituents into the environment from a RCRA facility has occurred.

Neither the site nor properties located within the searched distance were listed on this database.

6.6. Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) Facilities List: Distance Searched – ½ mile

The RCRA TSD database is a compilation by the EPA of facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste.

Neither the site nor properties located within the searched distance were listed on this database.

6.7. Resource Conservation and Recovery Act (RCRA) Generators List: Site and Adjacent Properties.

This list identifies sites that generate hazardous waste as defined by RCRA. Inclusion on this list is for permitting purposes and is not indicative of a release.

The site and adjacent properties were not listed on this database.

6.8. Emergency Response Notification System (ERNS) List: Distance Searched – Site

The ERNS database contains information of reported releases of oil and hazardous substances and is maintained by the EPA.

The site was not listed on this database.

6.9. United States Engineering Controls: Distance Searched – ½ mile

This database is an EPA listing of sites with engineering controls in place, such as various forms of caps, building foundations, liners, and treatment methods intended to eliminate pathways for regulated substances to enter environmental media or affect human health.

Neither the site nor properties located within the searched distance were listed on this database.

6.10. United States Institutional Controls: Distance Searched – ½ mile

This database is an EPA listing of sites with institutional controls in place, such as administrative measures, groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements, intended to prevent exposure to contaminants remaining on site.

Neither the site nor properties located within the searched distance were listed on this database.

6.11. State Sites: Distance Searched – 1 mile

The State Sites database consists of potential or confirmed hazardous substance release properties. This database is identified as the California EnviroStor Database.

The site was not listed on this database. The following six facilities were listed on this database within the searched distance.

Facility and Address	Distance/ Direction from Site	Groundwater Gradient (General for Vicinity Flow)	Regulatory Status	Completed Date	Environmental Concern (Y/N)
Standard Pacific of Ventura 2550 West Gonzales Road	0.76 mile north	Down to cross-gradient	No Further Action	10/03/1996	N
Northwest Elementary Gonzales Road/Patterson Road	0.76 mile north	Down to cross-gradient	No Further Action	03/06/2001	N
Oxnard ILS OTR MK AX Not listed	0.93 mile northeast	Cross-gradient	Inactive – Needs Evaluation	07/01/2005	N
Oxnard Cont Sch Not listed	0.43 mile southeast	Up-gradient	Inactive – Needs Evaluation	07/01/2005	N
Condor Helicopters & Aviation 2899 West 5 th Street	0.56 mile south	Up to cross-gradient	Refer: Other Agency	08/15/1995	N
Wingfield 5 th Street/Patterson Road	0.57 mile south	Up to cross-gradient	No Further Action	06/01/2005	N

Based on the distance, direction, and/or their current regulatory status, it is unlikely that activities at these facilities have impacted the environmental integrity of the site. Therefore,

Ninyo & Moore concluded these listings do not represent a REC or indicator of a REC for the site.

6.12. Solid Waste Landfill Sites (SWL): Distance Searched – ½ mile

The SWL database consists of open and closed solid waste disposal facilities and transfer stations. The data comes from the Integrated Waste Management Unit Database.

Neither the site nor properties located within the searched distance were listed on this database.

6.13. State Leaking Underground Storage Tank (LUST) Lists: Distance Searched – ½ mile

Databases of the LUST information system are maintained by the California State Regional Water Quality Control Boards (RWQCBs).

The site was not listed on this database. Coachella City Yard in Coachella, California was listed on the database as 0.23 mile south-southeast of the site. However, the city of Coachella is approximately 180 miles east of the site. This is considered a reporting error and is therefore not included in our review. The following four facilities (listed as six separate facilities by EDR) were listed on this database within the searched distance.

Facility, Address, Facility ID Number	Distance/ Direction from Site	Groundwater Gradient (General for Vicinity Flow)	Case Number	Regulatory Status	Closure Date (if applicable)	Environmental Concern (Y/N)
F.A. Borchard & Sons 1618 Doris Avenue	0.37 mile east	Up to cross-gradient	T0611100208	Case Closed	02/09/1998	N
Ven Oaks Plumbing 131 Mallard Way	0.45 mile southeast	Up-gradient	T0611100185	Case Closed	05/10/2006	N
Proodos Properties Inc. 2200 Teal Club Road	0.20 mile south-southeast	Up to cross-gradient	T0611100975	Case Closed	03/28/1996	N
V-Oxnard Airport Fuel Farm 2889 5 th Street	0.23 mile south-southeast	Up to cross-gradient	T0611100567	Case Closed	01/10/2001	N
			T0611100354	Case Closed	03/09/2012	
Notes: ID – Identification N/A – Not Applicable						

Based on the distance and current regulatory status, it is unlikely activities at these facilities have impacted the environmental integrity of the site.

6.14. Underground Storage Tank (UST) Registration List: Distance Searched – ¼ mile (Site and Adjacent)

UST records are provided by the SWRCB's Hazardous Substance Storage Container Database and the SWRCB Facility Inventory Database (FID). Inclusion of facilities on this list does not necessarily indicate a release.

The site and adjacent properties were not listed on this database. Although not adjacent, three facilities within the searched distance were listed on this database. The database included identification numbers, latitude, longitude, and/or permitting agency. Information regarding the capacity or contents of the UST was not provided. Based on this information, these facilities would not be a REC or indicator of a REC for the site.

6.15. Permitted Aboveground Storage Tank (AST) List: Distance Searched – ¼ mile

According to EDR, AST records are provided by the SWRCB. Inclusion of facilities on this list does not necessarily indicate a release.

The site and adjacent properties were not listed on this database.

6.16. Voluntary Cleanup Program Sites: Distance Searched – ½ mile

This database is a California Environmental Protection Agency (Cal-EPA) listing of properties involved in the voluntary remediation program.

Neither the site nor properties located within the searched distance were listed on this database.

6.17. Brownfields: Distance Searched – ½ mile

This database is a Department of Toxic Substances Control (DTSC) tracking system of California Brownfields sites.

Neither the site nor properties located within the searched distance were listed on this database.

6.18. Indian Reservation: Distance Searched – 1 mile

USGS map layer portrays Indian administered land within the United States with an area equal to or greater than 640 acres.

Indian reservation land was not found within the searched distance.

6.19. Indian Leaking Underground Storage Tank (LUST): Distance Searched – ½ mile

This is a database maintained by the EPA of LUSTs on Indian land in Arizona, California, New Mexico, and Nevada.

Neither the site nor properties located within the searched distance were listed on this database.

6.20. Indian Underground Storage Tank (UST): Distance Searched – ¼ mile

This is a database maintained by the EPA of USTs on Indian land.

Neither the site nor properties located within the searched distance were listed on this database.

6.21. Drycleaners: Distance Searched – ¼ mile

EDR provided a list of drycleaner related facilities that have EPA identification numbers. These facilities with certain Standard Industrial Classification codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants except rugs; carpet and upholstery cleaning; industrial launderers; laundry and garment services.

Neither the site nor properties located within the searched distance were listed on this database.

7. SITE RECONNAISSANCE

On March 13, 2015, Mr. Patrick Cullip of Ninyo & Moore conducted the site reconnaissance. The reconnaissance involved visual observations of the site and adjoining properties. Photographs taken during the site reconnaissance will be included in Appendix A in the final version of this report.

7.1. Use and Storage of Hazardous Substances and Petroleum Products

Use and storage of hazardous substances and petroleum products were not observed during the site reconnaissance.

7.2. Storage and Disposal of Hazardous Waste

Storage and disposal of hazardous waste was not observed during the site reconnaissance.

7.3. Evidence of Releases

Evidence of releases was not observed during the site reconnaissance.

7.4. Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)

Evidence of USTs (e.g., fill pipes, vent pipes, and emergency power generators) or ASTs was not observed on the site during the site reconnaissance.

One 1,000-gallon and two 500-gallon ASTs labeled as containing phosphoric acid, potassium chloride, and nitrogen were adjacent to the south of the site (Figure 2). The 1,000 gallon AST was empty. One of the 500 gallon ASTs was approximately half full; the other was a mobile 500 gallon AST (on wheels) that was approximately one-fifth full. Secondary containment was not observed for the ASTs. A pumping station was observed adjacent to the ASTs.

7.5. Polychlorinated Biphenyls

Historically PCBs, a group of hazardous substances and suspected human carcinogens, were widely used as an additive in cooling oils for electrical components. The manufacture of PCB containing equipment was discontinued in 1979. Typical sources of PCBs include electrical transformers. The three pole-mounted transformers were observed off site at the

pumping station. Power lines run along the southern border of the site from Patterson Road to the pumping station, where they end. Power lines also run north along the west edge of the site along Patterson Road, and extend underground before reaching Doris Avenue.

7.6. Wastewater Systems

Wastewater systems were not observed on the site during the site reconnaissance.

7.7. Stormwater Systems

Stormwater systems were not observed during the time of the site reconnaissance.

7.8. Wells

On-site wells were not observed during the site reconnaissance.

7.9. Surface/Subsurface Structures

Surface structures or evidence of subsurface structures (e.g., sumps, vaults, oil/water separators, and other surface impoundments) were not observed on the site.

7.10. On-Site Records

On-site records were not made available for Ninyo & Moore to review.

7.11. Controlled Substances Production

Evidence of controlled substance production, such as methamphetamine laboratories, was not noted within or adjacent to the boundaries of the site.

7.12. High-Voltage Electrical Transmission Lines

In accordance with Title 5, Section 14010 of the California Code of Regulations, the property line of a new school site should be at least the following distance from the edge of respective power line easements: (1) 100 feet for a 50-133 kilovolt (kV) line, (2) 150 feet for a 220-230 kV line, and (3) 350 feet for a 500-550 kV line.

Ninyo & Moore requested information from SCE on March 6, 2015 regarding overhead and underground electrical lines with the specified distances from the site. To date, Ninyo & Moore has not received a response from SCE. This is considered a data gap.

7.13. Underground Pipelines

Ninyo & Moore requested information regarding underground petroleum, natural gas, and water lines located within 1,500 feet of the site from the City of Oxnard (March 12, 2015), Office of the State Fire Marshal (SFM, February 24, 2015), and Public Utilities Commission (March 3, 2015). Ninyo & Moore also reviewed the National Pipeline Mapping System (NPMS, <https://www.npms.phmsa.dot.gov>). According to the SFM, “there are no pipelines jurisdictional to the State Fire Marshal in the area.” According to the City of Oxnard Public Works Department, requests for utility information should be sent to the individual companies, as per state guidelines.

7.13.1. Natural Gas Pipelines

According to the NPMS, a natural gas line is beneath Teal Club Road, approximately 1,000 feet south of the site. Additional information regarding the pipeline was not available. Ninyo & Moore reviewed the SCGC website (<http://www.socalgas.com/safety/pipeline-maps/ventura.shtml>) for additional information. The pipeline along Teal Club Road was listed as a high pressure distribution line: “pipelines that operate at pressures above 60 pounds per square inch (psi) and deliver gas in smaller volumes to the lower pressure distribution system.” Ninyo & Moore requested additional from the SCGC on March 5, 2015. To date, the SCGC has not yet responded to our request. This is considered a data gap.

7.13.2. Petroleum Pipelines

According to the NPMS, hazardous liquid pipelines are not within 1,500 feet of the site.

7.13.3. Water Pipelines

Ninyo & Moore requested information from the City of Oxnard on March 12, 2015 regarding high-pressure water pipelines within 1,500 feet of the site. To date, the City of Oxnard has not yet responded to our request. This is considered a data gap.

7.14. Railroad Tracks

During the site reconnaissance, railroad tracks were not observed within or adjacent to the site. According to the USGS, Oxnard Quadrangle topographic map, railroad tracks are not present within 1,500 feet of the site.

7.15. Airports

According to Google Earth, the Oxnard Airport and its nearest runway are approximately 0.3 nautical mile south of the site.

7.16. Reservoirs/Water Storage Tanks

Large water tanks/reservoirs were not observed on or near the site during the site reconnaissance. Ninyo & Moore requested information from the City of Oxnard on March 12, 2015 regarding large water tanks/reservoirs within 1,500 feet of the site. To date, the City of Oxnard has not yet responded to our request. This is considered a data gap.

7.17. Asbestos and Lead-Based Paint (LBP)

Evidence of structures was neither observed on the site during the site reconnaissance nor indicated by our historical research. Therefore, it is unlikely asbestos and LBP are present on the site.

7.18. Suspected Pesticides in Soil

Based on the current and historic site use as agricultural land, the suspected presence of pesticides and metals from agricultural usage in shallow soil would be considered a REC.

7.19. Lead in Drinking Water

According to the Consumer Confidence Report, 2013 Annual Water Quality Report for City of Oxnard Water Customers (City of Oxnard, 2014), concentrations of lead in the drinking water were not exceeded.

7.20. Methane

Evidence of possible sources of methane gas (e.g., landfills, dump sites, oil wells, etc.) was not observed at the site during the site reconnaissance. The site is within the administrative boundaries of the Montalvo, West oil field.

7.21. Other Environmental Issues

Other environmental issues were not noted on the site during our reconnaissance.

8. ENVIRONMENTAL REGULATORY AGENCY INQUIRIES

Based on the site reconnaissance, historical research, and environmental database review, information regarding the site and relevant surrounding properties requests for records were made to local government agencies and, if available, reviewed by Ninyo & Moore. Based on information obtained from local government agencies, it was judged that interviews of regulatory officials would not provide additional meaningful information to the Phase I ESA.

8.1. Regional Water Quality Control Board (RWQCB)

Ninyo & Moore made requests to the SLIC, Well Investigation Program and UST units of the Los Angeles RWQCB on February 24, 2015 to review records that may be available for the site APN. According to the RWQCB, they are unable to search by APN and could not process the request.

8.2. California Department of Toxic Substances Control (DTSC)

Ninyo & Moore made a request to the DTSC – Chatsworth office on February 24, 2015 to review records that may be available for the site APN. According to the DTSC – Chatsworth office, no such records exist for the site.

8.3. Ventura County Air Pollution Control District (VCAPCD)

Ninyo & Moore reviewed VCAPCD's Facility Information System (FIS) website (<http://www.vcapcd.org/FIS.htm>) for information regarding the site. According to the website, the site and properties within 0.25 mile of the site were not listed on the database.

Ninyo & Moore requested information from the VCAPCD on March 2, 2015 regarding odor, dust, and pesticide issues at the site. According to the VCAPCD, one complaint was on record in the general area of the site (Doris Avenue and Teal Club Road) for dust in July 2009. The VCAPCD referred Ninyo & Moore to the California Department of Pesticide Regulation (CDPR) for issues relating to pesticide use.

8.4. California Department of Pesticide Regulation (CDPR)

Ninyo & Moore requested information on pesticide issues and application rates for the area surrounding the site from the CDPR on March 3, 2015. The CDPR referred Ninyo & Moore to the Ventura County Agricultural Commissioner (VCAC).

8.5. Ventura County Agricultural Commissioner (VCAC)

Ninyo & Moore requested information on pesticide issues and application rates for the area surrounding the site on March 9, 2015. According to the VCAC records, the site APN was listed as Borchard Ranch under Hiji Bros. Inc. The site APN had been used to produce celery, lettuce, beans (unspecified), cabbage, and strawberries from 2006 to 2014. The VCAC records included several insecticides, fungicides, and herbicides used at the site APN, with quantities ranging from less than one gallon (various chemicals) to 10,163 gallons (Botran 5F). Adjacent properties used similar types of insecticides, fungicides, and herbicides. The use of pesticides at the site represents a REC.

8.6. Ventura County Department of Environmental Health (VCDEH)

Ninyo & Moore reviewed the Ventura County Department of Environmental Health (VCDEH) website (<http://www.ventura.org/rma/envhealth/cupa>) for information regarding LUST cases, ASTs, and hazardous waste for the site and surrounding properties. The intersection northwest of the site (Doris Avenue and North Patterson Road) was listed on the Hazardous Materials Release Report Database. According to the database, an unknown quantity of wastewater was discharged from a recreational vehicle on the side of the road on August 2, 2013. The specific location of the discharge was not identified. This information is not indicative of a REC. Adjacent properties were not listed on the VCDEH databases.

8.7. Oxnard Fire Department (OFD)

Ninyo & Moore made a request to the Oxnard Fire Department (OFD) on February 24, 2015 to review records that may be available for the site. According to the OFD, records are filed by address. Therefore, records were not available for the site.

9. VAPOR MIGRATION

Ninyo & Moore conducted a preliminary vapor encroachment screen (pVES) for potential chemicals of concern (COCs) that may migrate as vapors onto the site as a result of contaminated soil and/or groundwater near the site. The purpose of the pVES is to identify a vapor encroachment condition (VEC), which is the presence or likely presence of COC vapors in subsurface soils at the site caused by the release of vapors from contaminated soil or groundwater either on or near the site. The potential for VECs beneath the site was evaluated using a Vapor Encroachment Screening Matrix (VESM). The VESM included performing a Search Distance Test to identify if there are any known or suspect contaminated sites surrounding or up-gradient of the site within specific search radii, a COC Test (for those known or suspect contaminated sites identified within the Search Distance Test) to evaluate whether or not COCs are likely to be present, and a Critical Distance Test to evaluate whether or not COCs in a contaminated plume may be within the critical distance of the site (100 feet for non-petroleum contaminants, and 30 feet for petroleum hydrocarbon contaminants). Based on the site and surrounding properties, Ninyo & Moore determined it is unlikely a VEC currently exists beneath the site. A copy of the VESM is included in Appendix F.

10. INTERVIEW

Based on information obtained from local government agencies, it was judged that interviews of regulatory officials would not provide additional meaningful information to the Phase I ESA. Mr. Hiji, the key site manager, was not available for an interview during the site reconnaissance. Ninyo & Moore requested an interview with Mr. Hiji via telephone. To date, Mr. Hiji has not responded to our request. This is considered a data gap.

11. FINDINGS, OPINIONS, AND CONCLUSIONS

Based upon the results of this Phase I ESA, the following findings, opinions, and conclusions are provided.

11.1. Findings and Opinions

The following presents a summary of findings and opinions associated with this Phase I ESA performed for the site, including known or suspect RECs, historical RECs and de minimis environmental conditions (i.e., conditions that generally do not present a material risk of harm to public health or the environment):

- The site is at the southeast corner of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California, and is identified as APN 183-0-070-090. The site is currently owned by the Joan Henson Margaret M Anderson Ralph Borchard Jr Trustee. The site is occupied by Borchard Ranch, and is used for agricultural purposes. The site consists of a rectangular-shaped parcel totaling approximately 20 acres.
- Historical records reviewed by Ninyo & Moore indicated the site was agricultural land from at least 1938 to the time of this report. Due to the agricultural land use, the site was likely applied with commercial pesticides and/or herbicides. This represents a REC for the site.
- Hazardous substances, USTs, ASTs, evidence of releases, and other environmental issues were not identified on the site during the site reconnaissance.
- The site was not listed on environmental databases searched by EDR.
- To date, the key site manager, SCE, SCGC, the County of Ventura, and the City of Oxnard have not yet responded to our requests to review records or acquire information for the site. The user questionnaire was not returned to us at the time of this publication. These are considered data gaps. If information from these agencies alters the conclusions and recommendations of this report, an addendum will be prepared.
- Based on the completion of the VESM, it is unlikely that a VEC currently exists beneath the site.
- Potential off-site sources of environmental concern were not identified in the immediate site vicinity.

11.2. Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-13 of the 20-acre property on the southeast corner of the intersection of Doris Avenue and North Patterson Road, in the city of Oxnard, California, the property. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. This assessment has revealed no evidence of RECs in connection with the property except for the following:

- The current and historic agricultural land use of the site represents a REC.

Ninyo & Moore recommends a subsurface investigation to evaluate the REC.

12. ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined by §312.10 of 40 Code of Federal Regulations (CFR) 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the AAI in conformance with the standards and practices set forth in 40 CFR Part 312.



John Jay Roberts, PG, CEG
Senior Geologist



March 27, 2015

Date

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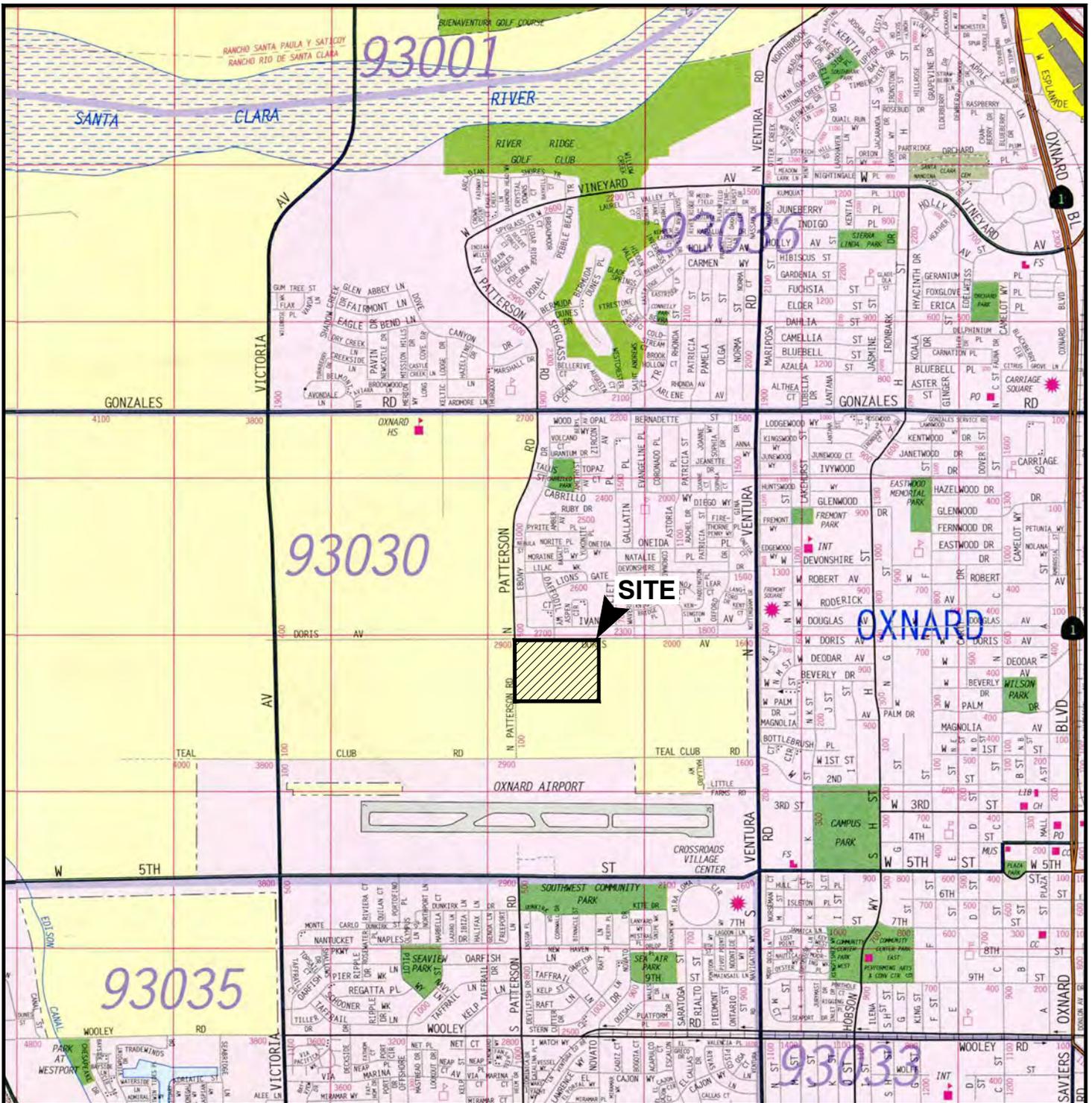
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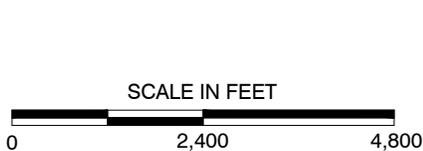
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REFERENCE: 2007 THOMAS GUIDE FOR VENTURA COUNTY, STREET GUIDE AND DIRECTORY.



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.
Map © Rand McNally, R.L.07-S-129

Ninyo & Moore

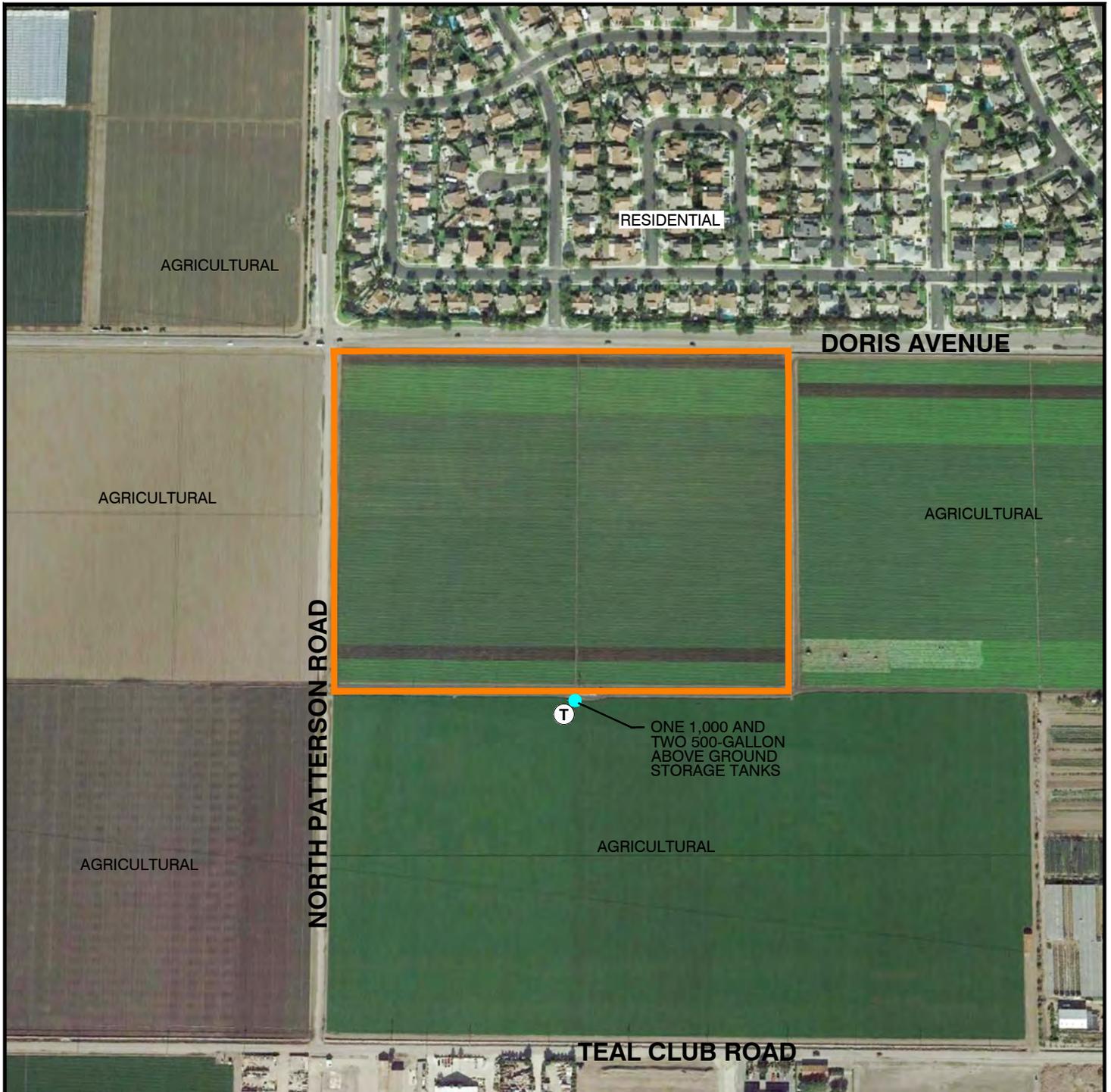
SITE LOCATION

FIGURE

PROJECT NO.	DATE
209348001	3/15

SOUTHEAST CORNER OF INTERSECTION OF
DORIS AVENUE AND PATTERSON ROAD
OXNARD, CALIFORNIA

1



REFERENCE: GOOGLE EARTH AERIAL PHOTO, 2015.



SCALE IN FEET



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
	SITE BOUNDARY
	POLE MOUNTED TRANSFORMER

Ninyo & Moore

SITE PLAN

FIGURE

PROJECT NO.	DATE
209348001	3/15

SOUTHEAST CORNER OF INTERSECTION OF
DORIS AVENUE AND PATTERSON ROAD
OXNARD, CALIFORNIA

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APPENDIX A

PHOTOGRAPHIC DOCUMENTATION



Photograph 1: Looking south at the site.



Photograph 2: Looking east at the site.



Photograph 3: View of power lines on the western portion of the site.



Photograph 4: View of dirt access road and power lines adjacent to the south of the site.



Photograph 5: View of pole-mounted transformers and pumping station adjacent to the south of the site.



Photograph 6: View of pumping station adjacent to the south of the site.



Photograph 7: View of 1,000-gallon empty AST and two 500-gallon ASTs (one mobile unit) labeled as containing phosphoric acid, potassium chloride, and nitrogen.



Photograph 8: Looking north away from the site at Doris Avenue, beyond which are residential properties.



Photograph 9: Looking east away from the site at agricultural land.



Photograph 10: Looking south away from the site at a dirt access road, beyond which is agricultural land.



Photograph 11: Looking west away from the site at North Patterson Road, beyond which is agricultural land.

APPENDIX B
USER PROVIDED INFORMATION



**PHASE I ENVIRONMENTAL SITE ASSESSMENT
OF
PROPOSED NEW ACADEMY SITE
DORIS AVENUE AND NORTH PATTERSON ROAD
OXNARD, CALIFORNIA 93030**

CARDNO ATC PROJECT NO. 052.45457.0002

MARCH 5, 2014

Prepared by:

Cardno ATC
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Prepared for:

Oxnard School District
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1.0 EXECUTIVE SUMMARY

1.1 General Information

Project Information:

Proposed New Academy Site

Site Information:

Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California 93030
Ventura County

Consultant Information:

Cardno ATC
25 Cupania Circle
Monterey Park, California 91755

Site Access Contact:

Robert "Scott" Burkett
Senior Program Executive
Caldwell Flores Winters, Inc.

Telephone: (323) 517-9780

Fax: (323) 517-9781

Reconnaissance Date: January 2, 2014

Site Assessor: Davis Tang

Senior Reviewer: Dawn Merrill

Environmental Professional: Jim Madden

Client Information:

Oxnard School District
1501 South A Street
Oxnard, California 93030



Davis Tang, Staff Scientist
Site Assessor / Report Author

Environmental Professional Statement:

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in § 312.10 part of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Jim Madden, Program Manager / Professional Geologist
Environmental Professional / Senior Reviewer

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1.2 Findings and Conclusions Summary

Cardno ATC has performed this Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Standard Practice E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 2.0 of this report. This assessment has revealed evidence of *recognized environmental conditions* in connection with the property as follows.

FINDINGS AND CONCLUSIONS SUMMARY						
Report Section	Further Action?	De Minimis Condition	Recognized Environmental Condition (REC)	Historical REC (HREC)	ASTM Non-Scope Condition	Description
4.0	User Provided Information	No				
5.1.1	Federal Database Findings	No				
5.1.2	State and Tribal Database Findings	No				
5.1.3	Local Environmental Record Sources	No				
5.3	Historical Records Sources	Yes	x			See Note 1
6.2	Hazardous Substance Use, Storage and Disposal	No				
6.3	Underground Storage Tanks	No				
6.4	Aboveground Storage Tanks	No				
6.5	Other Petroleum Products	No				
6.6	Polychlorinated Biphenyls (PCBs)	No				
6.7	Unidentified Substance Containers	No				
6.8	Nonhazardous Solid Waste	No				
6.9	Wastewater	No				
6.10	Waste Pits, Ponds and Lagoons	No				
6.11	Sumps	No				
6.12	Septic Systems	No				
6.13	Stormwater Management System	No				
6.14	Wells	No				
7.0	Interviews	No				
8.1	Asbestos-Containing Material (ACM)	No				
8.2	Radon	No				
8.3	Lead in Drinking Water	No				
8.4	Lead-Based Paint (LBP)	No				
8.5	Mold Screening	No				
8.6	Additional User Requested Conditions	No				

Note 1: Historical and current use of the property has included agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in surface soils. Based on the fact that future development of the property includes a planned school site, the past use of pesticides is considered *recognized environmental conditions* in association with the property.

1.3 Significant Data Gap Summary

Data gaps may have been encountered during the performance of this Phase I ESA and are discussed within the section of the report where they were encountered. However, according to ASTM Standard Practice E 1527-05, data gaps are only significant if "other information and/or professional experience raise reasonable concerns involving the data gap." The following is a summary of *significant data gaps* identified in this report.

SIGNIFICANT DATA GAP SUMMARY		
	Report Section	Description
3.5	Current Uses of Adjoining Properties	No <i>significant data gap</i> identified.
4.2	Environmental Liens or Activity and Use Limitations (AULs)	No <i>significant data gap</i> identified.
5.1	Standard Environmental Records	No <i>significant data gap</i> identified.
5.2	Physical Setting Sources	No <i>significant data gap</i> identified.
5.3	Historical Records Sources	No <i>significant data gap</i> identified.
6.1	Methodology and Limiting Conditions	No <i>significant data gap</i> identified.
7.0	Interviews	No <i>significant data gap</i> identified.

1.4 Recommendations

Based on information collected from the Phase I ESA, Cardno ATC recommends that a subsurface investigation be conducted to sample for pesticides and arsenic at the property.

2.0 INTRODUCTION

2.1 Purpose

The purpose of this Phase I ESA was to identify *recognized environmental conditions* and certain potential environmental conditions outside the scope of ASTM Standard Practice E 1527-05 in connection with the property at the time of the site reconnaissance. This report documents the findings, opinions and conclusions of the Phase I ESA.

2.2 Scope

This Phase I ESA was conducted in general accordance with the ASTM Standard Practice E 1527-05, consistent with a level of care and skill ordinarily practiced by the environmental consulting profession currently providing similar services under similar circumstances. Significant additions, deletions or exceptions to ASTM Standard Practice E 1527-05 are noted below or in the corresponding sections of this report. The scope of this assessment included an evaluation of the following:

- Physical setting characteristics of the property through a review of referenced sources such as topographic maps and geologic, soils and hydrologic reports.
- Usage of the property, adjoining properties and surrounding area through a review of referenced historical sources such as land title records, fire insurance maps, city directories, aerial photographs, prior reports and interviews.
- Observations and interviews regarding current property usage and conditions including: the use, treatment, storage, disposal or generation of hazardous substances, petroleum products, hazardous wastes, nonhazardous solid wastes and wastewater.
- Usage of adjoining and surrounding area properties and the likely impact of known or suspected releases of hazardous substances or petroleum products from those properties on the property.
- Information in referenced environmental agency databases and local environmental records, within the specified approximate minimum search distance from the property.

The scope of the assessment also included consideration of the following environmental issues or conditions that are beyond the scope of ASTM Standard Practice E 1527-05:

- The scope of work for the Mold Screening was intended to be consistent with ASTM E 2418-06: Standard Guide for Readily Observable Mold and Conditions Conducive to Mold in Commercial Buildings: Baseline Survey Process. The scope of work, including potential deviations from the Standard Guide, is described as follows. The interview was limited to at least one knowledgeable person from property management or engineering staff. The document review was limited to only those relevant documents made readily available to Cardno ATC in a timely manner. The Mold Screening did not include destructive methods of observation. No sampling or laboratory analyses were conducted. The Mold Screening service as described herein was limited in scope and by the time and cost considerations typically associated with performing a Phase I ESA. No method can guarantee that a hazard will be discovered if evidence of the hazard is not encountered within the performance of the Mold Screening as authorized and that opinions and conclusions must, out of necessity, be extrapolated from limited information and discrete, non-continuous data points. Unidentified mold or other microbial conditions may exist on the property.

- Visual observation of suspect asbestos-containing materials (ACM), consisting of providing an opinion on the condition of suspect ACM on the property based upon visual observation during the site reconnaissance. No sampling of suspect ACM was conducted.
- Radon document review, consisting of the review of published radon data with regard to the potential for elevated levels of radon gas in the surrounding area of the property. No radon sampling was conducted.
- Lead in Drinking Water Data review, consisting of contacting the water supplier for information regarding whether or not the potable water provided to the property meets the drinking water standards for lead.
- Visual observation of suspect lead-based paint (LBP), consisting of providing an opinion on the potential for suspect LBP based on the construction date of buildings on the property and visual observation of the condition of suspect LBP.
- Wetlands document review, consisting of a review of a current National Wetlands Inventory map of the surrounding area to note if the property is identified as having a wetland.
- Flood plain document review, consisting of a review of a reasonably ascertainable flood plain map of the surrounding area to note if the property is identified as being located within a flood plain.

2.3 Significant Assumption

The assumptions in this report were not considered as having significant impact on the determination of *recognized environmental conditions* associated with the property.

2.4 Limitations and Exceptions

Cardno ATC has prepared this Phase I ESA report using reasonable efforts to identify *recognized environmental conditions* associated with hazardous substances or petroleum products at the property. Findings contained within this report are based on information collected from observations made on the day(s) of the site reconnaissance and from reasonably ascertainable information obtained from certain public agencies and other referenced sources.

The ASTM Standard Practice E 1527-05 recognizes inherent limitations for Phase I ESAs, including, but not limited to:

- *Uncertainty Not Eliminated* – A Phase I ESA cannot completely eliminate uncertainty regarding the potential for *recognized environmental conditions* in connection with any property.
- *Not Exhaustive* – A Phase I ESA is not an exhaustive investigation of the property and environmental conditions on such property.
- *Past Uses of the Property* – Phase I requirements only require review of standard historical sources at five year intervals. Therefore, past uses of property at less than five year intervals may not be discovered.

Users of this report may refer to ASTM Standard Practice E 1527-05 for further information regarding these and other limitations. This report is not definitive and should not be assumed to be a complete and/or specific definition of all conditions above or below grade. Current subsurface conditions may differ from the conditions determined by surface observations, interviews and reviews of historical sources. The

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most reliable method of evaluating subsurface conditions is through intrusive techniques, which are beyond the scope of this report. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other property construction purposes. Any use of this report by any party, beyond the scope and intent of the original parties, shall be at the sole risk and expense of such user.

Cardno ATC makes no representation or warranty that the past or current operations at the property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated. Regardless of the findings stated in this report, Cardno ATC is not responsible for consequences or conditions arising from facts not fully disclosed to Cardno ATC during the assessment.

An independent data research company provided the government agency database referenced in this report. Information on surrounding area properties was requested for approximate minimum search distances and is assumed to be correct and complete unless obviously contradicted by Cardno ATC's observations or other credible referenced sources reviewed during the assessment. Cardno ATC shall not be liable for any such database firm's failure to make relevant files or documents properly available, to properly index files, or otherwise to fail to maintain or produce accurate or complete records.

Cardno ATC makes no warranty, guarantee or certification regarding the quality, accuracy or reliability of any prior report provided to Cardno ATC and discussed in this Phase I ESA report. Cardno ATC expressly disclaims any and all liability for any errors or omissions contained in any prior reports provided to Cardno ATC and discussed in this Phase I ESA report.

Cardno ATC used reasonable efforts to identify evidence of aboveground and underground storage tanks and ancillary equipment on the property during the assessment. "Reasonable efforts" were limited to observation of accessible areas, review of referenced public records and interviews. These reasonable efforts may not identify subsurface equipment or evidence hidden from view by things including, but not limited to, snow cover, paving, construction activities, stored materials and landscaping.

Any estimates of costs or quantities in this report are approximations for commercial real estate transaction due diligence purposes and are based on the findings, opinions and conclusions of this assessment, which are limited by the scope of the assessment, schedule demands, cost constraints, accessibility limitations and other factors associated with performing the Phase I ESA. Subsequent determinations of costs or quantities may vary from the estimates in this report. The estimated costs or quantities in this report are not intended to be used for financial disclosure related to the Financial Accounting Standards Board (FASB) Statement No. 143, FASB Interpretation No. 47, Sarbanes/Oxley Act or any United States Securities and Exchange Commission reporting obligations, and may not be used for such purposes in any form without the express written permission of Cardno ATC.

Cardno ATC is not a professional title insurance or land surveyor firm and makes no guarantee, express or implied, that any land title records acquired or reviewed in this report, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

The Environmental Professional Statement in Section 1.1 of this report does not "certify" the findings contained in this report and is not a legal opinion of such *Environmental Professional*. The *Environmental Professional* Statement is intended to document Cardno ATC's opinion that an individual meeting the qualifications of an Environmental Professional was involved in the performance of the assessment and that the activities performed by, or under the supervision of, the *Environmental Professional* were performed in conformance with the standards and practices set forth in 40 CFR Part 312 per the methodology in ASTM Standard Practice E 1527-05 and the scope of work for this assessment.

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Per ASTM Standard Practice E 1527-05, Section 6, User Responsibilities, the User of this assessment has specific obligations for performing tasks during this assessment that will help identify the possibility of *recognized environmental conditions* in connection with the property. Failure by the User to fully comply with the requirements may impact their ability to use this report to help qualify for *Landowner Liability Protections* (LLPs) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Cardno ATC makes no representations or warranties regarding a User's qualification for protection under any federal, state or local laws, rules or regulations.

In accordance with the ASTM Standard Practice E 1527-05, this report is presumed to be valid for a six month period. If the report is older than six months, the following information must be updated in order for the report to be valid: (1) regulatory review, (2) site visit, (3) interviews, (4) specialized knowledge and (5) environmental liens search. Reports older than one year may not meet the ASTM Standard Practice 1527-05 and therefore, the entire report must be updated to reflect current conditions and property-specific information.

Other limitations and exceptions that are specific to the scope of this report may be found in corresponding sections.

2.5 Special Terms and Conditions (User Reliance)

This report is for the use and benefit of, and may be relied upon by, The Oxnard School District, and any of its affiliates and their respective successors and assigns, in connection with a commercial real estate transaction involving the property. No third party is authorized to use this report for any purpose. Any use by or distribution of this report to third parties, without the express written consent of Cardno ATC, is at the sole risk and expense of such third party.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The property is located at the intersection of Doris Avenue and North Patterson Road in Ventura County, Oxnard, California. According to information obtained from Mr. Robert “Scott” Burkett, Senior Program Executive with Caldwell Flores Winters, Inc., the 20 acre property is part of a larger 107.99 acre parcel which is identified with Ventura County’s Assessor’s Parcel Number (APN) 183-0-070-090. The legal description for the property is “Lots 133, 158, 159, 160, partly in the City of Oxnard, County of Ventura Book 8, Page 1.” The Site Vicinity Map is located in Appendix A. The Site Plan is located in Appendix B. Site Photographs are provided in Appendix C.

3.2 Surrounding Area General Characteristics

The surrounding area consists of agricultural and residential uses. Doris Avenue borders the property to the north, beyond which are residences. North Patterson Road borders the property to the west, beyond which is agricultural land. The surrounding area to the east and south of the property is also agricultural land. The topography in the surrounding area and property is generally level with a slight slope to the west. Specific uses of the adjoining properties are presented in Section 3.5.

3.3 Current Use of the Property

The property is an approximately 20 acres, rectangular-shaped parcel of a larger 107.99 acre parcel. The property is currently utilized as agricultural land for lettuce with no onsite structures.

3.4 Description of Property Improvements

The following table provides general descriptions of the property improvements.

PROPERTY IMPROVEMENTS	
Size of Property (approximate)	20 acres (source: Ventura County Assessor Parcel Map)
General Topography of Property	Generally level with a slight slope to the west
Adjoining and/or Access/Egress Roads	Doris Avenue to the north and North Patterson Road to the west.
Paved or Concrete Areas (including parking)	None
Unimproved Areas	100%
Landscaped Areas	None
Surface Water	Irrigation ditches
Potable Water Source	City of Oxnard Public Works
Sanitary Sewer Utility	City of Oxnard
Storm Sewer Utility	City of Oxnard
Electrical Utility	None
Natural Gas Utility	None
Current Occupancy Status	100%
Unoccupied Buildings/Spaces/Structures	None
Number of Occupied Buildings	None
Building Name or General Building Description	N/A (Not Applicable, no buildings onsite)
Number of Floors	N/A
Total Square Feet of Space (approximate)	N/A
Construction Completion Date (year)	N/A
Construction Type	N/A
Interior Finishes Description	N/A
Exterior Finishes Description	N/A
Cooling System Type	N/A

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PROPERTY IMPROVEMENTS	
Heating System Type	N/A
Emergency Power	None

3.5 Current Uses of Adjoining Properties

Current uses of the adjoining properties were observed to be as follows:

North- Adjacent to the north of the property, beyond Doris Avenue, is single-family residences.

East- Adjacent to the east of the property is agricultural land.

South- Adjacent to the south is agricultural land.

West- Adjacent to the west of the property, beyond North Patterson Road, is agricultural land.

None of the adjoining sites appeared on the regulatory databases. The review of adjoining sites did not reveal any environmental concerns.

4.0 USER PROVIDED INFORMATION

The following section summarizes information (if any) provided by The Oxnard School District (User) with regard to the Phase I ESA. Documentation may be found in Appendix D or where referenced in this report.

4.1 Title Records

The User provided no title records information.

4.2 Environmental Liens or Activity and Use Limitations (AULs)

User provided no information regarding property environmental liens or activity and use limitations. Cardno ATC contracted Environmental Data Resources, Inc. (EDR) to perform an environmental lien search for the property. According to EDR, no environmental liens or AULs (such as engineering controls, land use restrictions or institutional controls) were identified for the property. A copy of the EDR report, which includes the current deed and legal description, is included in Appendix G.

4.3 Specialized Knowledge or Experience of the User

The User provided no specialized knowledge regarding *recognized environmental conditions* associated with the property.

4.4 Significant Valuation Reduction for Environmental Issues

The User provided no information regarding a significant valuation reduction for environmental issues associated with the property.

4.5 Owner, Property Manager and Occupant Information

The User provided information identifying Mr. Scott Burkett as the property access contact.

4.6 Reason for Performing Phase I ESA

The Oxnard School District intends to obtain site approval from the California Department of Education for use as a school site, purchase/acquire the property, and developed a new middle school.

4.7 Other User Provided Documents

The User provided Cardno ATC with an area map of the property and the proposed school site plan. User provided documentation is included in Appendix D.

5.0 RECORDS REVIEW

5.1 Standard Environmental Records

The regulatory agency database report discussed in this section, provided by EDR of Milford, Connecticut, was reviewed for information regarding reported releases of hazardous substances and petroleum products on or near the property. Cardno ATC also reviewed the “unmappable” (also referred to as “orphan”) listings within the database report, cross-referencing available address information and facility names. Unmappable sites are listings that could not be plotted with confidence, but are potentially in the general area of the property based on the partial street address, city, or zip code. Any unmappable site that was identified by Cardno ATC as being within the approximate minimum search distance from the property based on the site reconnaissance and/or cross-referencing to mapped listings, is included in the discussion within this section. The complete regulatory agency database report may be found in Appendix E.

The following is a summary of the findings of the database review.

SUMMARY OF FEDERAL, STATE AND TRIBAL DATABASE FINDINGS			
Regulatory Database	Approx. Minimum Search Distance	Property Listed?	# Sites Listed
Federal National Priority List (NPL)	1 mile	No	0
Federal Delisted NPL	½ mile	No	0
Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list	½ mile	No	0
Federal CERCLIS No Further Remedial Action Planned (NFRAP)	½ mile	No	0
Federal Resource Conservation and Recovery Act (RCRA), Corrective Action facilities (CORRACTS)	1 mile	No	0
Federal RCRIS non- CORRACTS Treatment, Storage, and Disposal Facilities (TSDF)	½ mile	No	0
Federal RCRA Generators	Property & Adjoining	No	0
Federal Institutional Control/Engineering Control Registry	Property	No	0
Federal Emergency Response Notification System (ERNS) list	Property	No	0
State and Tribal NPL – RESPONSE	1 mile	No	0
State and Tribal CERCLIS – ENVIROSTOR	½ mile	No	6
State and Tribal Landfill or Solid Waste Disposal Sites	½ mile	No	0
State and Tribal Leaking Underground Storage Tanks (LUST)	½ mile	No	7
California Spills, Leaks, and Incident Clean-Ups (CA SLIC)	½ mile	No	0
State and Tribal Registered Underground Storage Tanks (UST), Historical UST (HIST UST) list; California Facility Inventory Database (CA FID UST); and Statewide Environmental Evaluation and Planning System (SWEEPS UST)	Property & Adjoining	No	0
State and Tribal Institutional Control/Engineering Control Registry	Property	No	0
State and Tribal Voluntary Cleanup Site	½ mile	No	0
State and Tribal Brownfield Sites	½ mile	No	0
HAZNET	Property	No	0
Formerly Used Defense Sites (FUDS)	1 mile	No	1
Drycleaners	¼ mile	No	0
Hist Cleaners	¼ mile	No	0
Hist Auto Stations	¼ mile	No	0

5.1.1 Federal Agency Database Findings

The property parcel was not identified on the federal databases searched by EDR.

Based on distance, topography, assumed groundwater gradient, current regulatory status, and/or the absence of reported releases, none of the other sites listed in the federal agency databases are considered to represent a likely past, present or material threat of release on the property.

5.1.2 State and Tribal Database Findings

The property parcel was not identified on the state and tribal databases searched by EDR.

The following offsite listing(s) with a known or significant potential for release and impact on the property were identified in the state and tribal databases searched:

F.A. Borchard & Sons
1618 Doris Avenue
Oxnard, California

Databases: LUST, HIST UST, HIST CORTESE

Approximate Distance from the Property: 1,959 feet to the east

Assumed Groundwater Gradient: Cross-gradient

Regulatory Data Summary: This site is identified on the LUST database with a "Completed - Case Closed" status as of February 9, 1998. The details of the LUST case include groundwater contamination by leaking gasoline; the leak was first discovered on June 9, 1987. The site historically utilized one 550-gallon unleaded gasoline UST and one 3,000-gallon unleaded gasoline UST; the year the tanks were installed is not provided.

Discussion: Based on the regulatory closure status, the distance, and the cross-gradient hydrologic position relative to the property parcel, this site is not considered to represent a *recognized environmental condition* to the property.

Based on distance, topography, assumed groundwater gradient, current regulatory status, and/or the absence of reported releases, none of the other sites listed in the state and tribal databases are considered to represent a likely past, present or material threat of release on the property.

5.1.3 Local Environmental Records Sources

Ventura County Environmental Health (VCEH)

VCEH is the leading environmental health, USTs, and hazardous materials authority in Ventura County. Cardno ATC submitted an online request each for any environmental health, USTs, and hazardous materials records pertaining to the property to VCEH. According to VCEH, no environmental health, USTs, or hazardous materials records pertaining to the property exists.

Oxnard Fire Department (OFD)

Cardno ATC requested a review of any files pertaining to Underground Storage Tanks (USTs) or hazardous materials records for the property from the OFD's Certified Unified Program Agency (CUPA). At the time of writing this report, a response has not been received from the OFD's CUPA. Should Cardno ATC be provided with pertinent files in regard to the property, an addendum to the report will be issued.

California Department of Toxic Substances Control (DTSC)

According to the DTSC EnviroStor website, <http://www.envirostor.dtsc.ca.gov/public>, the DTSC has no files for the property.

Regional Water Quality Control Board (RWQCB)

According to the RWQCB GeoTracker website, <http://geotracker.waterboards.ca.gov>, the RWQCB has no records pertaining to the property.

Ventura County Air Pollution Control District (VCAPCD)

Cardno ATC submitted a facsimile request to the VCAPCD to review any available records pertaining to the property. At the time of writing this report, a response has not been received from the VCAPCD. Should Cardno ATC be provided with pertinent files in regard to the property, an addendum to the report will be issued.

City of Oxnard Zoning Information

Cardno ATC reviewed the City of Oxnard zoning map. According to the zoning map, the property is zoned RW2 for Multiple-Family Water Oriented. A copy of the zoning map is provided in Appendix L.

Electrical Utility Company

There are currently no electrical utilities at the property.

Water and Sewer Utility

Cardno ATC spoke with a representative from the City of Oxnard Public Works (OPW), the representative confirmed that the OPW currently provides potable water utilities to the property. Cardno ATC confirmed with the OPW's 2012 Consumer Confidence Report that the municipally supplied water meets or exceeds all drinking water standards, including those for lead. According to this report, the water provided to the City of Oxnard is imported from various areas such as Calleguas Municipal Water District (CMWD), United Water Conservation District (UWCD), and water produced locally by the City's wells. The City of Oxnard provides storm and sanitary sewer to the area; however, there is no storm or sanitary drains located on the property. A copy of the Consumer Confidence Report is included in Appendix L.

5.2 Physical Setting Sources

5.2.1 Topography

The property is located on the United States Geological Survey (USGS) 7.5-Minute Series Topographic Map, Oxnard Quadrangle, dated 1967. Based on Cardno ATC's review of this topographic map, the property is located approximately 44 feet above mean sea level (MSL). The topography of the property is generally level with a slight slope to the southwest. A copy of the topographic map is included in Appendix A.

5.2.2 Geology

According to the EDR Radius Map Report, the stratigraphic units underlying the property are Cenozoic era, Quaternary system, and Quaternary series in a stratified sequence. EDR obtains its geologic age and stratigraphic unit information from P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale, USGS Digital Data Series DDS - 11 (1994).

5.2.3 Soils

According to the EDR Radius Map Report, the dominant soil class at the property is of the Camarillo component with a loam texture. This type of soil is classified as a Class C hydrologic group with slow infiltration rates due to soil layers impeding downward movement of water, or soils with moderately fine or fine textures. Soils of this component are partially hydric, are poorly drained, and have a high corrosion potential for uncoated steel. The top 24 inches are of the loam texture class, 24-50 inches consists of stratified layers of sandy loam to sandy clay loam, and 50-79 inches are of a fine sand texture.

5.2.4 Hydrology

According to a 2013 semi-annual groundwater monitoring report from an ongoing cleanup site located approximately 0.7 miles to the east-northeast, groundwater is anticipated to range from 9.99 feet to 26.1 feet below ground surface (bgs) (Well No. MW-1). Groundwater flow direction is anticipated to flow to the north-northwest. Therefore, in assessing potential off-site environmental impacts, properties located directly southeast of the property are of primary concern. However, factors such as underground structures, seasonal fluctuations, soil and bedrock geology, production wells, and other factors beyond the scope of this study often locally influence actual groundwater flow direction. The actual groundwater flow direction under the property can only be accurately determined by installing groundwater monitoring wells, which is beyond the scope of this project.

5.2.5 Other Physical Setting Sources

Flood Plain Map

Cardno ATC reviewed a copy of the on-line Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Map Number #061111C0905E, dated January 20, 2010. According to the flood plain map, the property is not located within a 100-year floodplain. The property is located in flood Zone X, which designates areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood. A copy of the flood plain map is provided in Appendix L.

Wetlands Map

According to information obtained from the United States Fish & Wildlife Service (USFWS) National Wetland Inventory (NWI) database, <http://www.fws.gov/wetlands/Data/Mapper.html>, no designated wetlands are depicted on the property. Based on visual observations during the site reconnaissance, no evidence of a natural wetlands area was observed. A copy of the web-generated map is included in Appendix L.

5.3 Historical Records Sources

The following table summarizes the findings of the research presented below pertaining to historical property and surrounding area uses.

HISTORICAL USE SUMMARY				
Period	Identified Historical Uses		Source(s)	Intervals/Comments
	Property	Surrounding Area		
Prior to 1940	Agricultural	Agricultural	Aerial Photographs Topographic Maps	No data gaps or concerns were identified.
1941-1960	Agricultural	Agricultural	Aerial Photographs Topographic Maps	No data gaps or concerns were identified.

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Proposed New Academy Site
Doris Avenue and North Patterson Road
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HISTORICAL USE SUMMARY				
Period	Identified Historical Uses		Source(s)	Intervals/Comments
	Property	Surrounding Area		
1961-1980	Agricultural	Agricultural	Aerial Photographs Topographic Maps	No data gaps or concerns were identified.
1981 to 2001	Agricultural	Agricultural	Aerial Photographs	No data gaps or concerns were identified.
2002-present	Agricultural	Agricultural	Aerial Photographs	No data gaps or concerns were identified.

Historical and current use of the property has included agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in surface soils. Based on the fact that future development of the property includes a planned school site, the past use of pesticides is considered *recognized environmental conditions* in association with the property.

5.3.1 Aerial Photographs

Cardno ATC reviewed available aerial photographs of the property and surrounding areas from EDR. Available aerial photographs ranged from 1927 to 2012. The following are descriptions and interpretations from the aerial photograph review.

AERIAL PHOTOGRAPH SUMMARY		
Year	Scale	Comments
1938 1947 1959 1964 1970 1977	1 inch = 500 feet	Property: The property appears to be agricultural and/or vacant land. Surrounding Area: The surrounding areas appear to be agricultural land.
1989 1994 2005 2009 2010 2012	1 inch = 500 feet	Property: The property appears to be agricultural and/or vacant land. Surrounding Area: The surrounding area to the north, beyond Doris Avenue, is developed with single-family residences. The surrounding areas to the east, south, and west (beyond North Patterson Road) are agricultural land.

Historical and current use of the property has included agriculture. Agricultural uses may potentially represent an environmental concern, as the use of pesticides on the property may result in residual pesticides in surface soils. Based on the fact that future development of the property includes a planned school site, the past use of pesticides is considered *recognized environmental conditions* in association with the property. Copies of reproducible aerial photographs are included in Appendix F.

5.3.2 Fire Insurance Maps

A search for fire insurance maps for the property and surrounding area was conducted by EDR. No such maps for the property were available. The “unmapped property” letter provided by EDR is included in Appendix G.

5.3.3 Property Tax Files

Cardno ATC reviewed reasonably ascertainable tax files at the Ventura County Assessor's Office for historical ownership information pertaining to the property as follows:

OWNERSHIP SUMMARY	
Owner	Year

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Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

OWNERSHIP SUMMARY	
Owner	Year
Borchard Family Trust	1954
Frances Joan Henson, Margaret Mary Anderson	1995
City of Oxnard	1997
Friedrich Disclaimer Trust	1998
Ralph W. and Helen M. Borchard	2000
J & P Douglas Family Trust	2003

The review of tax files did not identify past uses indicating recognized environmental conditions at the property or surrounding area.

5.3.4 Recorded Land Title Records

The acquisition of recorded land title records was not required by the scope of work for the Phase I ESA.

5.3.5 Historical USGS Topographic Maps

Cardno ATC reviewed available historical USGS Topographic Quadrangles provided by EDR for information regarding past uses of the property. The topographic maps ranged from 1904 through 1967. Due to the scale and resolution of the maps, specific land uses cannot be determined for the 1904, 1910, and 1947 maps; however, it can be safely assumed specific uses include agricultural and/or vacant land. The 1951 and 1967 maps depict the property as agricultural and/or vacant land. The review of historical USGS Topographic Quadrangles did not identify past uses indicating *recognized environmental conditions* at the property or surrounding area. Documentation is included in Appendix G.

5.3.6 City Directories

Research regarding the availability of historical city directories was conducted by EDR for the years from 1926 to 2013. However, listings for the property and/or adjoining properties were not found. The review of city directories did not identify any *recognized environmental conditions* at the property or surrounding area. Documentation is included in Appendix G.

5.3.7 Building Department Records

Cardno ATC attempted to review historical building department records at the Oxnard Building and Engineering Department for information regarding past uses of the property. Building permits for the property do not exist as no building was constructed on the property.

5.3.8 Zoning/Land Use Records

Cardno ATC reviewed the City of Oxnard zoning map. According to the zoning map, the property is zoned RW2 for Multiple-Family Water Oriented. No historical use information was available for the property. The review of historical zoning/land use records did not identify past uses indicating *recognized environmental conditions* at the property or surrounding area. Documentation is included in Appendix G.

5.3.9 Prior Reports

No prior reports were made available for review.

5.3.10 Other Historical Sources

No other historical sources were reviewed.

6.0 SITE RECONNAISSANCE

The following is a summary of visual and/or physical observations of the property on the day of the site visit. Photographs can be found in Appendix C.

6.1 Methodology and Limiting Conditions

Mr. Davis Tang, Staff Scientist with Cardno ATC, conducted the site reconnaissance on January 2, 2014. Mr. Gordon Jenewein with Development Planning Service, Inc. and Mr. Scott Burkett, Senior Program Executive with Caldwell Flores Winters, Inc., was onsite during the site reconnaissance. The site reconnaissance consisted of visual and/or physical observations of: the property and improvements; adjoining sites as viewed from the property; and the surrounding area based on visual observations made during the trip to and from the property. Unimproved portions of the property (if any) were observed along the perimeter and in a general grid pattern in safely accessible areas, if accessible and possible.

6.2 Hazardous Substance Use, Storage, and Disposal

Cardno ATC did not observe the use, storage or disposal of hazardous substances on the property.

6.3 Underground Storage Tanks (USTs)

Cardno ATC did not observe evidence of USTs on the property.

6.4 Aboveground Storage Tanks (ASTs)

Cardno ATC did not observe evidence of ASTs on the property.

6.5 Other Petroleum Products

Cardno ATC did not observe evidence of the use, storage or disposal of other petroleum products on the property.

6.6 Polychlorinated Biphenyls (PCBs)

Cardno ATC did not observe evidence of the use, storage or disposal of PCB-containing transformers, hydraulic lifts, or other equipment on the property.

6.7 Unidentified Substance Containers

Cardno ATC did not observe the presence of unidentified substance containers on the property.

6.8 Nonhazardous Solid Waste

Cardno ATC did not observe evidence of the generation, storage or disposal of nonhazardous solid waste on the property.

6.9 Wastewater

Cardno ATC observed evidence of wastewater generated, treated or discharged (including sanitary sewage and stormwater) on the property or to adjoining properties as summarized below.

WASTEWATER SUMMARY TABLE			
Type of Wastewater	Generation Process	Treatment System?	Discharged To?
Stormwater	Routine operations	No	Unimproved areas

Based upon conditions observed and the nature of the wastewater generated and discharged (stormwater), Cardno ATC concludes that the generation of wastewater at the property does not represent a *recognized environmental condition* to the property.

6.10 Waste Pits, Ponds and Lagoons

Cardno ATC did not observe evidence of waste pits, ponds or lagoons on the property.

6.11 Drains and Sumps

Cardno ATC did not observe evidence of drains or sumps on the property.

6.12 Septic Systems

Cardno ATC did not observe evidence of a septic system on the property.

6.14 Wells

Cardno ATC did not observe evidence of wells on the property.

7.0 INTERVIEWS

The following persons were interviewed to obtain information regarding *recognized environmental conditions* in connection with the property:

INTERVIEW SUMMARY				
Role	Name	Title/Company	Years Assoc. With Property	Interview Type
Site Escort	Mr. Scott Burkett	Senior Program Executive / Caldwell Flores Winters, Inc.	Unknown	In Person
Site Escort	Mr. Gordon Jenewein	Development Planning Services, Inc.	Six	In Person

Not included in this listing are employees of city, county, or state government, who were contacted for the purpose of retrieving routine public information pertaining to the site, and who were not expected to possess first-hand knowledge regarding *recognized environmental conditions* at the property.

Pertinent information from the interviews is discussed in applicable sections of this report with details (including failed attempts to interview) documented on Record of Communication forms in Appendix J.

8.0 OTHER ENVIRONMENTAL CONDITIONS

8.1 Asbestos-Containing Materials (ACM)

Based on the scope of work for this ESA, sampling and analyses for ACM was not conducted. No buildings were present at the time of the site reconnaissance.

8.2 Radon

Radon is a naturally occurring colorless, odorless gas that is a by-product of the decay of radioactive materials potentially present in bedrock and soil. The EPA guidance action level for annual residential exposure to radon is 4.0 picoCuries per liter of air (pCi/L). The guidance action level is not a regulatory requirement for private owners of commercial real estate, but is commonly used for comparison purposes to suggest whether further action at a building may be prudent.

Cardno ATC's review of published radon data from EDR's Regulatory Database Report indicates that the property is located in EPA Zone 1, identified as an area of high propensity with regard to the potential for elevated levels of radon gas. According to EDR's Regulatory Database Report, of the 38 sites tested in Ventura County, the average radon concentration was 0.478 pCi/L, which is below the EPA guidance action level of 4.0 pCi/L. Based on these statistics, no additional radon investigations are recommended.

8.3 Lead in Drinking Water

Cardno ATC spoke with a representative from the City of Oxnard Public Works (OPW), the representative confirmed that the OPW currently provides potable water utilities to the property. Cardno ATC confirmed with the OPW's 2012 Consumer Confidence Report that the municipally supplied water meets or exceeds all drinking water standards, including those for lead. According to this report, the water provided to the City of Oxnard is imported from various areas such as Calleguas Municipal Water District (CMWD), United Water Conservation District (UWCD), and water produced locally by the City's wells. Lead in drinking water testing was not conducted for this ESA.

8.4 Lead-Based Paint (LBP)

Consideration of LBP on painted surfaces was not included in the scope of work for this ESA.

8.5 Mold Screening

Cardno ATC conducted a limited screening survey for readily observable mold and conditions conducive to mold on the property. The screening consisted of limited interview, document review and physical observation. No buildings were present at the time of the site reconnaissance.

8.6 Additional User Requested Conditions

No additional User requested services were included in the scope of work for this ESA.

9.0 REFERENCES

ASTM International, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation E 1527-05, November 2005.

ASTM International, *Standard Guide for Readily Observable Mold and Conditions Conducive to Mold in Commercial Buildings: Baseline Survey Process*, ASTM Designation E 2418-06, March 2006.

California, State of, Environmental Protection Agency, Department of Toxic Substances Control, EnviroStor website, <http://www.envirostor.dtsc.ca.gov/public>.

Environmental Data Resources, Inc., Aerial Photograph Decade Package, Inquiry No. 3820276.5, December 30, 2013.

Environmental Data Resources, Inc., Certified Sanborn Map Report, Inquiry No. 3820276.3, December 30, 2013.

Environmental Data Resources, Inc., EDR Radius Map Report with GeoCheck, Inquiry No. 3820276.2s, December 30, 2013.

Environmental Data Resources, Inc., Historical City Directory Abstract, Inquiry No. 3820276.6, December 30, 2013.

Environmental Data Resources, Inc., Historical Topographic Map Report, Inquiry No. 3820276.4, December 30, 2013.

Environmental Data Resources, Inc., Environmental Lien and AUL Search, Inquiry No. 3820276.7, December 30, 2013.

Federal Emergency Management Agency website, <http://www.fema.gov>.

Oxnard, City of, Planning Division website, <http://developmentservices.cityofoxnard.org/7/76/>.

Oxnard, City of, Public Works, 2012 Consumer Confidence Report.

Oxnard, City of, Fire Department, CUPA Division, email communication, cupa@ci.oxnard.ca.us.

Regional Water Quality Control Board, GeoTracker website, <http://geotracker.swrcb.ca.gov>.

South Coast Air Quality Management District, website, <http://www.aqmd.gov>.

United States Fish and Wildlife Service, National Wetlands mapper website, <http://nwi.fws.gov>.

United States Geological Survey, 7.5-Minute Series, Topographic Map, *Van Nuys, California*, 1972.

Ventura, County of, Environmental Health, online records request, <http://www.ventura.org/rma/envhealth/>.

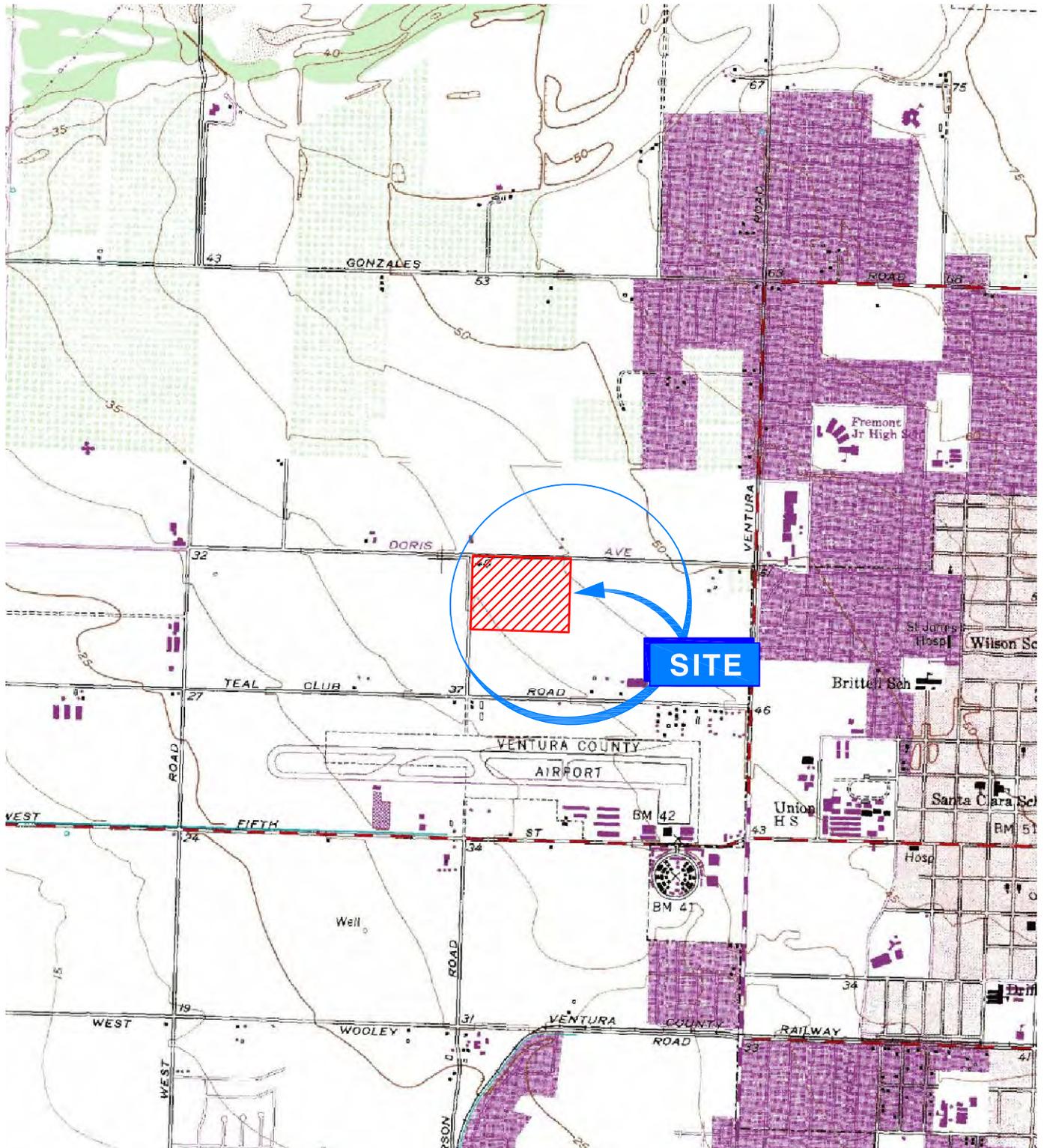
Ventura, County of, Assessor, records review.

10.0 APPENDICES

- Appendix A - Site Vicinity Map**
- Appendix B - Site Plan**
- Appendix C - Site Photographs**
- Appendix D - User Provided Documentation**
- Appendix E - Regulatory Database Report**
- Appendix F - Aerial Photographs**
- Appendix G - Historical Research Documentation**
- Appendix H - Prior Reports**
- Appendix I - Resumes**
- Appendix J - Records of Communication**
- Appendix K - Laboratory Reports**
- Appendix L - Other Supporting Documentation**
- Appendix M - Terminology**

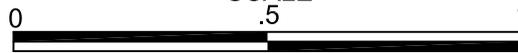
PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

APPENDIX A
SITE VICINITY MAP



OXNARD, CALIFORNIA QUADRANGLE (PROVISIONAL EDITION 1967)

SCALE



MILES
1:24,000



SITE VICINITY MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPOSED NEW ACADEMY SITE
 DORIS AVENUE AND NORTH PATTERSON ROAD
 OXNARD, CALIFORNIA

PROJECT NUMBER: 052.45457.0002

TASK NO.: 1

APPENDIX

REVIEW BY: D. TANG

DRAWN BY: DAW

A



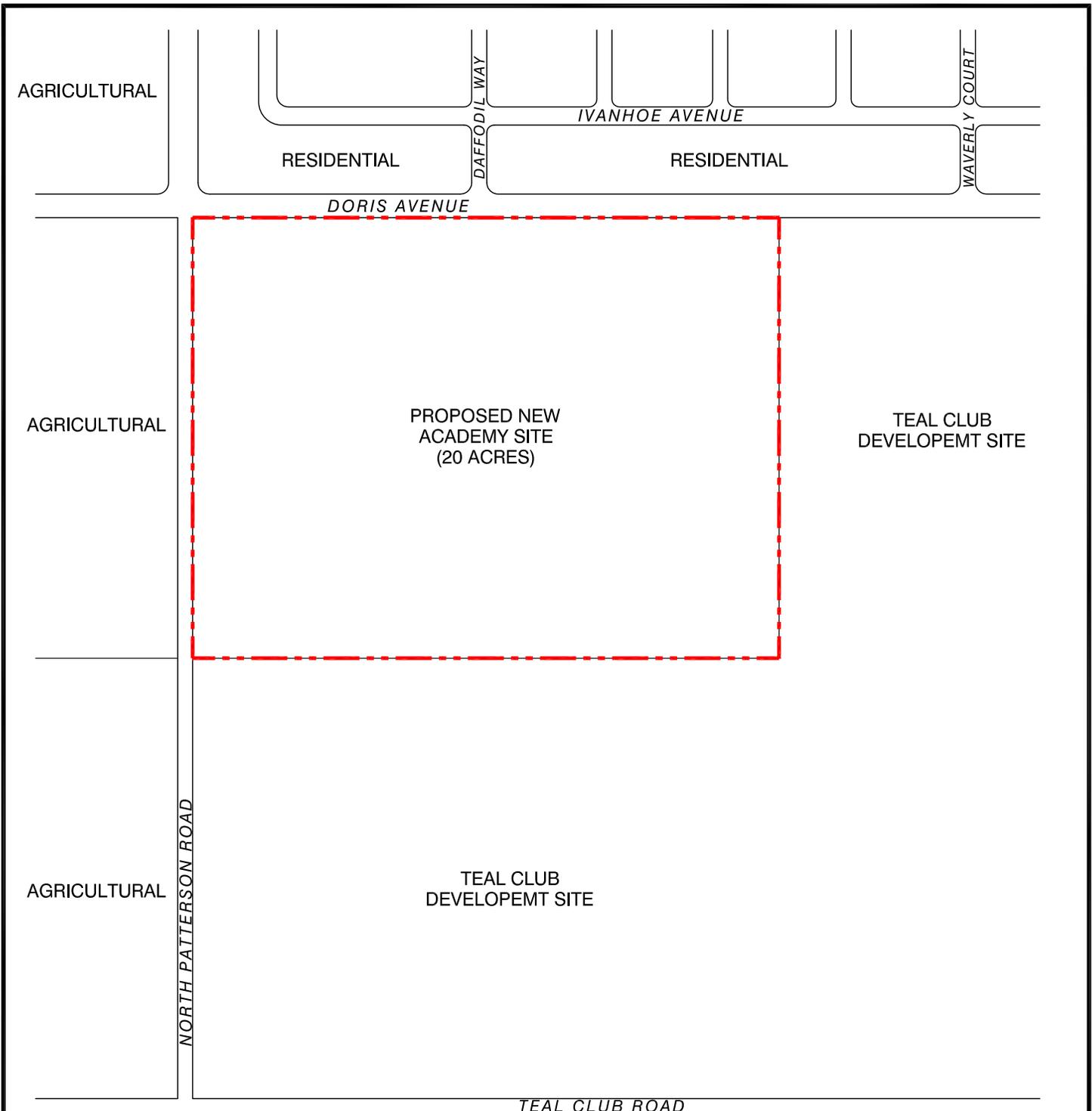
25 Cupania Circle
 Monterey Park, CA 91755

Ph: (323) 517-9780 *** Fax: (323) 517-9781

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

APPENDIX B

SITE PLAN



SITE PLAN
NOT TO SCALE



PHASE I ENVIRONMENTAL SITE ASSESSMENT PROPOSED NEW ACADEMY SITE DORIS AVENUE AND NORTH PATTERSON ROAD OXNARD, CALIFORNIA	PROJECT NUMBER: 052.45457.0002	TASK NO.: 1	APPENDIX
	REVIEW BY: D. TANG	DRAWN BY: DAW	B
 25 Cupania Circle Monterey Park, CA 91755 Ph: (323) 517-9780 *** Fax: (323) 517-9781			

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

APPENDIX C
SITE PHOTOGRAPHS

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California



Photo 1: Looking southeast at the property from North Patterson Road.



Photo 2: Looking east at the property from North Patterson Road.



Photo 3: View of the north-adjacent single-family residences, beyond Doris Avenue.



Photo 4: View of east-adjacent agricultural field.



Photo 5: View of the south-adjacent agricultural field.



Photo 6: View of the west-adjacent agricultural field, beyond North Patterson Road.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
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APPENDIX D
USER PROVIDED DOCUMENTATION

PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
Proposed New Academy Site
Doris Avenue and North Patterson Road
Oxnard, California

APPENDIX E
REGULATORY DATABASE REPORT

Proposed New Academy Site

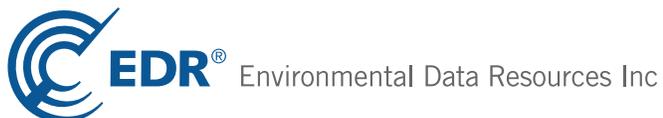
200-399 DORIS AVE

Oxnard, CA 93030

Inquiry Number: 3820276.2s

December 30, 2013

The EDR Radius Map™ Report with GeoCheck®



440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

200-399 DORIS AVE
OXNARD, CA 93030

COORDINATES

Latitude (North): 34.2071000 - 34° 12' 25.56"
Longitude (West): 119.2057000 - 119° 12' 20.52"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 296780.8
UTM Y (Meters): 3787123.8
Elevation: 44 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 34119-B2 OXNARD, CA
Most Recent Revision: 1967

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year: 2012
Source: USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List

EXECUTIVE SUMMARY

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls
LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

SLIC..... Statewide SLIC Cases
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST..... Aboveground Petroleum Storage Tank Facilities

EXECUTIVE SUMMARY

INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
Toxic Pits..... Toxic Pits Cleanup Act Sites
CDL..... Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LIENS..... Environmental Liens Listing
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
UMTRA..... Uranium Mill Tailings Sites
US MINES..... Mines Master Index File

EXECUTIVE SUMMARY

TRIS.....	Toxic Chemical Release Inventory System
TSCA.....	Toxic Substances Control Act
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS.....	Section 7 Tracking Systems
ICIS.....	Integrated Compliance Information System
PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
FINDS.....	Facility Index System/Facility Registry System
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
CA BOND EXP. PLAN.....	Bond Expenditure Plan
NPDES.....	NPDES Permits Listing
UIC.....	UIC Listing
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
WIP.....	Well Investigation Program Case List
VENTURA CO. BWT.....	Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
ENF.....	Enforcement Action Listing
HAZNET.....	Facility and Manifest Data
EMI.....	Emissions Inventory Data
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
PRP.....	Potentially Responsible Parties
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
MED WASTE VENTURA.....	Medical Waste Program List
Financial Assurance.....	Financial Assurance Information Listing
2020 COR ACTION.....	2020 Corrective Action Program List
LEAD SMELTERS.....	Lead Smelter Sites
PCB TRANSFORMER.....	PCB Transformer Registration Database
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
US FIN ASSUR.....	Financial Assurance Information
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
COAL ASH DOE.....	Steam-Electric Plant Operation Data
MWMP.....	Medical Waste Management Program Listing
PROC.....	Certified Processors Database
EPA WATCH LIST.....	EPA WATCH LIST
WDS.....	Waste Discharge System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Auto Stat.....	EDR Exclusive Historic Gas Stations
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 11/06/2013 has revealed that there are 6 ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>STANDARD PACIFIC OF VENTURA</i> Status: No Further Action	<i>2550 W GONZALES RD</i>	<i>N 1/2 - 1 (0.754 mi.)</i>	<i>21</i>	<i>51</i>
<i>NORTHWEST ELEMENTARY</i> Status: No Further Action	<i>GONZALES ROAD/PATTERSON 1/2 - 1 (0.757 mi.)</i>		<i>22</i>	<i>55</i>
OXNARD ILS OTR MK AX Status: Inactive - Needs Evaluation		NE 1/2 - 1 (0.932 mi.)	E25	60
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OXNARD CONT SCH Status: Inactive - Needs Evaluation		SE 1/4 - 1/2 (0.430 mi.)	16	41
CONDOR HELICOPTERS & AVIATION Status: Refer: Other Agency	2899 WEST 5TH STREET	S 1/2 - 1 (0.559 mi.)	D18	47
<i>WINGFIELD</i> Status: No Further Action	<i>5TH STREET/PATTERSON ROS 1/2 - 1 (0.571 mi.)</i>		<i>D19</i>	<i>49</i>

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 10/16/2013 has revealed that there are 7 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
F.A. BORCHARD & SONS	1618 DORIS AVE	E 1/4 - 1/2 (0.371 mi.)	C14	38
F.A. BORCHARD & SONS Status: Completed - Case Closed	1618 DORIS	E 1/4 - 1/2 (0.371 mi.)	C15	40
VEN OAKS PLUMBING Status: Completed - Case Closed	131 MALLARD WAY	SE 1/4 - 1/2 (0.448 mi.)	17	42

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PROODOS PROPERTIES INC	2200 TEAL CLUB RD	SSE 1/8 - 1/4 (0.197 mi.)	B4	12
PROODOS PROPERTIES INC Status: Completed - Case Closed	2200 TEAL CLUB ROAD	SSE 1/8 - 1/4 (0.197 mi.)	B7	15
VCO OXNARD AIRPORT-HANGAR III Status: Completed - Case Closed	2889 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B10	20
V-OXNARD AIRPORT FUEL FARM Status: Completed - Case Closed	2889 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B13	36

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 10/16/2013 has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AVIATION MARINE SERVICES	2800 TEAL CLUB ROAD	S 1/8 - 1/4 (0.187 mi.)	A2	10
PROODOS PROPERTIES INC	2200 TEAL CLUB ROAD	SSE 1/8 - 1/4 (0.197 mi.)	B7	15
VENTURA COUNTY DEPARTMENT OF A	2889 FIFTH STREET	SSE 1/8 - 1/4 (0.235 mi.)	B11	34

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are

EXECUTIVE SUMMARY

3 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AVIATION MARINE SERVICES	2800 TEAL CLUB RD	S 1/8 - 1/4 (0.187 mi.)	A1	8
ROTOR AIDS	2200 TEAL CLUB RD	SSE 1/8 - 1/4 (0.197 mi.)	B6	14
VENTURA CO. OXNARD AIRPORT	2889 W 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B12	34

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ROTOR AIDS, INC.	2200 TEAL CLUB RD	SSE 1/8 - 1/4 (0.197 mi.)	B5	13
OXNARD AIR TRAFFIC CONTROL TWR	2889 W 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B8	17
OXNARD AIRPORT	2889 W 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B9	18

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 3 SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AVIATION MARINE SERVICES	2800 TEAL CLUB RD	S 1/8 - 1/4 (0.187 mi.)	A1	8
ROTOR AIDS	2200 TEAL CLUB RD	SSE 1/8 - 1/4 (0.197 mi.)	B6	14
VENTURA CO. OXNARD AIRPORT	2889 W 5TH ST	SSE 1/8 - 1/4 (0.235 mi.)	B12	34

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 09/10/2013 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MID CONTINENT OF CA INC	2834 TEAL CLUB RD	SSW 1/8 - 1/4 (0.187 mi.)	A3	10

EXECUTIVE SUMMARY

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 12/31/2011 has revealed that there is 1 FUDS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
OXNARD ILS OUTER MARK ANNEX		NE 1/2 - 1 (0.929 mi.)	E24	59

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>F.A. BORCHARD & SONS</i>	<i>1618 DORIS</i>	<i>E 1/4 - 1/2 (0.371 mi.)</i>	<i>C15</i>	<i>40</i>
<i>VEN OAKS PLUMBING</i>	<i>131 MALLARD WAY</i>	<i>SE 1/4 - 1/2 (0.448 mi.)</i>	<i>17</i>	<i>42</i>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>PROODOS PROPERTIES INC</i>	<i>2200 TEAL CLUB ROAD</i>	<i>SSE 1/8 - 1/4 (0.197 mi.)</i>	<i>B7</i>	<i>15</i>
<i>VCO OXNARD AIRPORT-HANGAR III</i>	<i>2889 5TH ST</i>	<i>SSE 1/8 - 1/4 (0.235 mi.)</i>	<i>B10</i>	<i>20</i>
<i>V-OXNARD AIRPORT FUEL FARM</i>	<i>2889 5TH ST</i>	<i>SSE 1/8 - 1/4 (0.235 mi.)</i>	<i>B13</i>	<i>36</i>

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 10/21/1993 has revealed that there are 3 Notify 65 sites within approximately 1 mile of the target property.

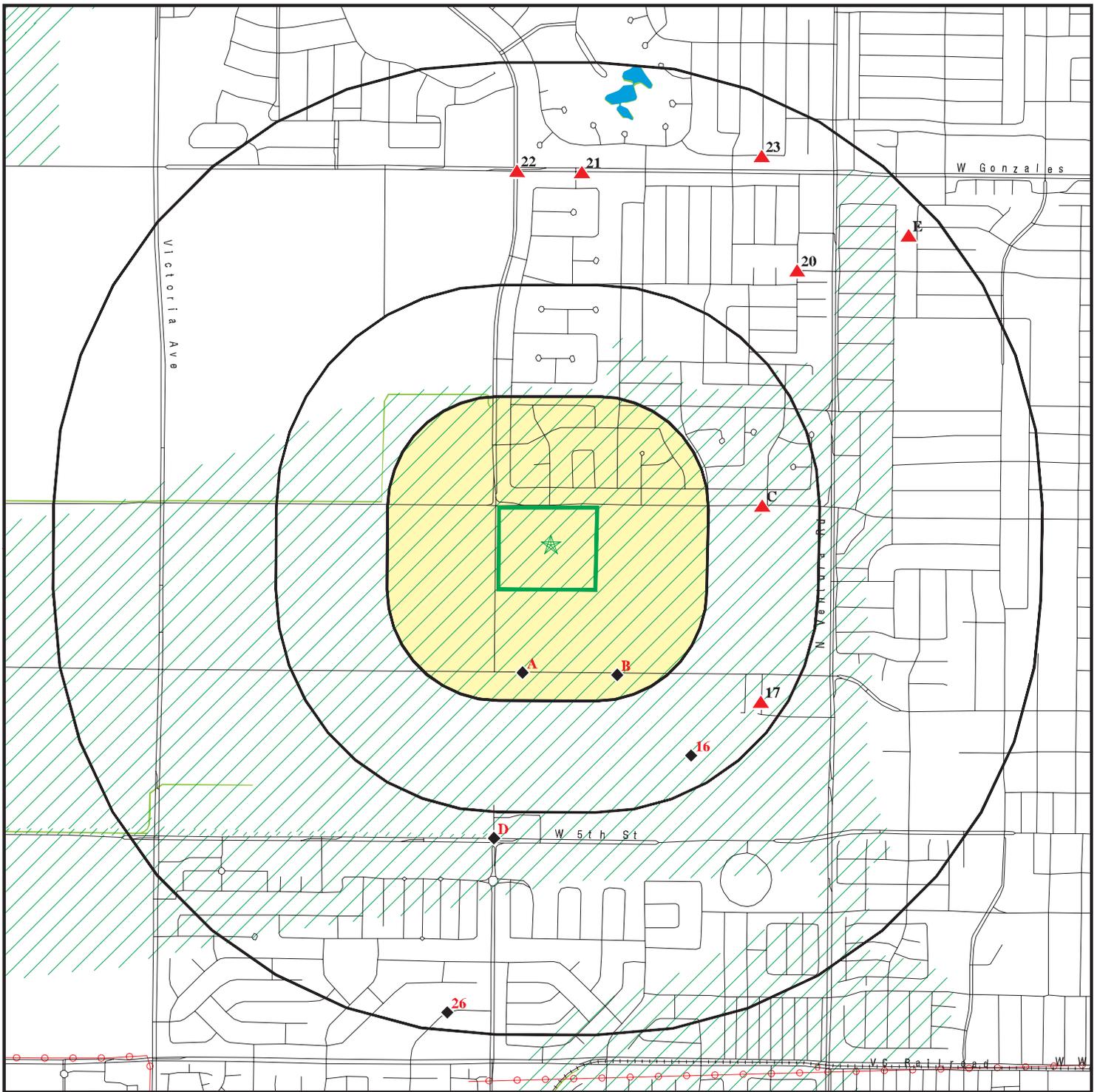
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GINA & IVYWOOD DR.	GINA & IVYWOOD DR.	NE 1/2 - 1 (0.697 mi.)	20	51
Not reported	1710 ARLENE	NNE 1/2 - 1 (0.872 mi.)	23	59
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
APARTMENT COMPLEX	1040 KELP LANE	SSW 1/2 - 1 (0.957 mi.)	26	61

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 12 records.

<u>Site Name</u>	<u>Database(s)</u>
WALKER'S VENTURA SALVAGE CITY DUMP	CERC-NFRAP
DUNES SUBDIVISION	CERC-NFRAP
BAILARD LDFL	CERC-NFRAP
OXNARD 1962	SWF/LF
WAGON WHEEL AKA: SANTA CLARA (WAGO	SWF/LF
COTTAGES OXNARD TRACT 9450- APN #1	LUST
COTTAGES OXNARD TRACT 9450- APN #1	LUST
COMMANDER NAUMANN DRILL SITE	FINDS, EMI
DUNES SUBDIVISION SITE - OXNARD	FINDS
CITY OF OXNARD	SLIC
NAVARRO SITE	SLIC
COMMANDER NAUMANN DRILL SITE	EMI

OVERVIEW MAP - 3820276.2s



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

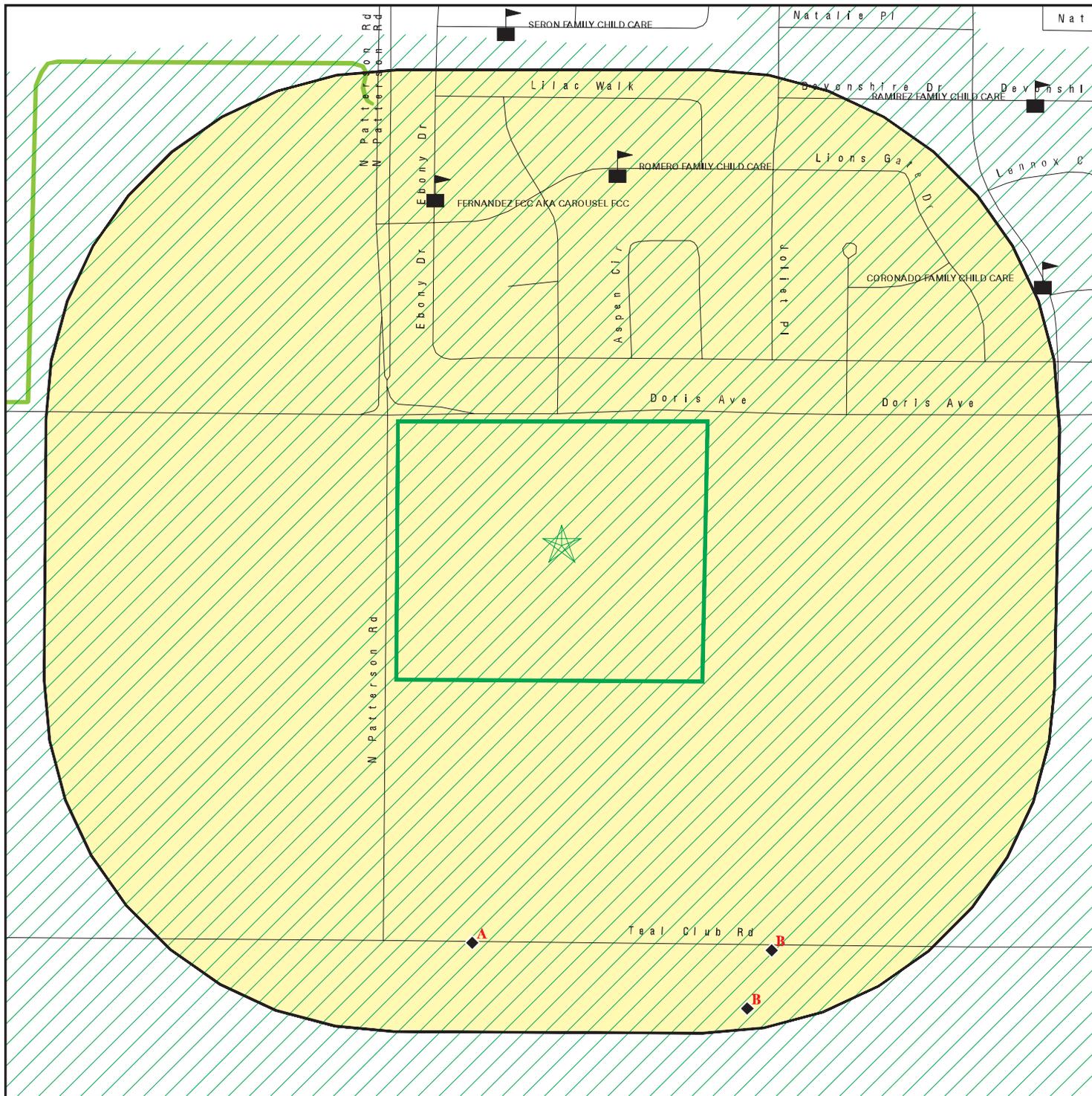


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Proposed New Academy Site
 ADDRESS: 200-399 DORIS AVE
 Oxnard CA 93030
 LAT/LONG: 34.2071 / 119.2057

CLIENT: Cardno ATC #52
 CONTACT: Davis Tang
 INQUIRY #: 3820276.2s
 DATE: December 30, 2013 3:12 pm

DETAIL MAP - 3820276.2s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Oil & Gas pipelines from USGS
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Proposed New Academy Site
 ADDRESS: 200-399 DORIS AVE
 Oxnard CA 93030
 LAT/LONG: 34.2071 / 119.2057

CLIENT: Cardno ATC #52
 CONTACT: Davis Tang
 INQUIRY #: 3820276.2s
 DATE: December 30, 2013 3:15 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site List</i>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL RESPONSE</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	1	5	NR	6
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	4	3	NR	NR	7

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		0	3	NR	NR	NR	3
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		0	3	NR	NR	NR	3
HIST UST	0.250		0	3	NR	NR	NR	3
SWEEPS UST	0.250		0	3	NR	NR	NR	3
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
LIENS	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	1	NR	1
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		0	3	2	NR	NR	5
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	3	NR	3
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
VENTURA CO. BWT	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
MED WASTE VENTURA	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MWMP	0.250		0	0	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	0	NR	NR	NR	0
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1
South
1/8-1/4
0.187 mi.
985 ft.

AVIATION MARINE SERVICES
2800 TEAL CLUB RD
OXNARD, CA 93030

CA FID UST
SWEEPS UST
ENF

U001966418
N/A

Site 1 of 3 in cluster A

Relative:
Lower

CA FID UST:
Facility ID: 56002321
Regulated By: UTNKA
Regulated ID: Not reported
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 2800 TEAL CLUB RD
Mailing Address 2: Not reported
Mailing City, St, Zip: OXNARD 93030
Contact: Not reported
Contact Phone: Not reported
DUNS Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Actual:
39 ft.

SWEEPS UST:

Status: Active
Comp Number: 1727
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-001727-000001
Actv Date: Not reported
Capacity: 3000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 1

ENF:

Region: 4
Facility Id: 268643
Agency Name: Tri-County Builders Supply
Place Type: Facility
Place Subtype: Not reported
Facility Type: All other facilities
Agency Type: Privately-Owned Business
Of Agencies: 1
Place Latitude: 34.202991
Place Longitude: -119.206611
SIC Code 1: Not reported
SIC Desc 1: Not reported
SIC Code 2: Not reported
SIC Desc 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AVIATION MARINE SERVICES (Continued)

U001966418

SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	AGT
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	4CUPA000021
Reg Measure Id:	166963
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	238385
Region:	4
Order / Resolution Number:	SEL
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	09/07/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	09/07/2000

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

AVIATION MARINE SERVICES (Continued)

U001966418

ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 4CUPA000021
Description:	Notice of Noncompliance sent 9/7/00 for failure to pay fees.
	Not reported
Program:	AGT
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0

A2
 South
 1/8-1/4
 0.187 mi.
 985 ft.

AVIATION MARINE SERVICES
2800 TEAL CLUB ROAD
OXNARD, CA
 Site 2 of 3 in cluster A

UST U002169445
 N/A

Relative:
Lower

VENTURA CO. UST:
 Facility ID: D 1033
 Facility Status: Inactive

Actual:
 39 ft.

A3
 SSW
 1/8-1/4
 0.187 mi.
 986 ft.

MID CONTINENT OF CA INC
2834 TEAL CLUB RD
OXNARD, CA 93030
 Site 3 of 3 in cluster A

RCRA NonGen / NLR 1000108604
FINDS CAD095147385

Relative:
Lower

RCRA NonGen / NLR:
 Date form received by agency: 11/12/1980
 Facility name: MID CONTINENT OF CA INC
 Facility address: 2834 TEAL CLUB RD
 OXNARD, CA 93030
 EPA ID: CAD095147385
 Mailing address: PO BOX 489
 OXNARD, CA 93030
 Contact: ENVIRONMENTAL MANAGER
 Contact address: 2834 TEAL CLUB RD
 OXNARD, CA 93030
 Contact country: US
 Contact telephone: (805) 487-6365
 Contact email: Not reported
 EPA Region: 09
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:
 39 ft.

Owner/Operator Summary:
 Owner/operator name: WESTERN FARM SERVICE
 Owner/operator address: NOT REQUIRED
 NOT REQUIRED, ME 99999
 Owner/operator country: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MID CONTINENT OF CA INC (Continued)

1000108604

Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002664625

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

B4
SSE
1/8-1/4
0.197 mi.
1042 ft.

PROODOS PROPERTIES INC
2200 TEAL CLUB RD
OXNARD, CA

LUST **S104164926**
N/A

Site 1 of 10 in cluster B

Relative:
Lower

LUST REG 4:

Actual:
42 ft.

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-95076	
Status:	Case Closed	
Substance:	Jet Fuel	
Substance Quantity:	Not reported	
Local Case No:	95076	
Case Type:	Groundwater	
Abatement Method Used at the Site:	EDET	
Global ID:	T0611100975	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	Not reported	
Date Leak Discovered:	2/8/1995	
Date Leak First Reported:	2/8/1995	
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	2/8/1995	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:	Not reported	
Date the Case was Closed:	3/28/1996	
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	
Operator:	Not reported	
Water System:	Not reported	
Well Name:	Not reported	
Approx. Dist To Production Well (ft):	3068.3520395838009511841642405	
Source of Cleanup Funding:	F	
Preliminary Site Assessment Workplan Submitted:	2/8/1995	
Preliminary Site Assessment Began:	3/6/1995	
Pollution Characterization Began:	3/6/1995	
Remediation Plan Submitted:	11/6/1995	
Remedial Action Underway:	11/6/1995	
Post Remedial Action Monitoring Began:	1/2/1996	
Enforcement Action Date:	Not reported	
Historical Max MTBE Date:	Not reported	
Hist Max MTBE Conc in Groundwater:	Not reported	
Hist Max MTBE Conc in Soil:	Not reported	
Significant Interim Remedial Action Taken:	Not reported	
GW Qualifier:	Not reported	
Soil Qualifier:	Not reported	
Organization:	Not reported	
Owner Contact:	Not reported	
Responsible Party:	PROODOS PROPERTIES INC	
RP Address:	Not reported	
Program:	LUST	
Lat/Long:	34.2028686 / -1	
Local Agency Staff:	KCK	

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRODOS PROPERTIES INC (Continued)

S104164926

Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:

Region: VENTURA
Facility ID: 95076
Status: Case Closed

B5
SSE
1/8-1/4
0.197 mi.
1042 ft.

ROTOR AIDS, INC.
2200 TEAL CLUB RD
OXNARD, CA 93030
Site 2 of 10 in cluster B

HIST UST **U001579850**
N/A

Relative:
Lower

HIST UST:

Region: STATE
Facility ID: 00000019514
Facility Type: Other
Other Type: HELICOPTER CHARTER
Total Tanks: 0004
Contact Name: LOUIS J. LAUGHLIN
Telephone: 8059843860
Owner Name: EVERGREEN HELICOPTERS, INC.
Owner Address: 3850 THREE MILE LANE
Owner City,St,Zip: MCMINNVILLE, OR 97128

Actual:
42 ft.

Tank Num: 001
Container Num: 1
Year Installed: 1980
Tank Capacity: 00001500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: 3/6" inches
Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: JET
Year Installed: 1980
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: 1/4 inches
Leak Detection: Visual, Stock Inventor

Tank Num: 003
Container Num: 100
Year Installed: 1980
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: 1/4 inches
Leak Detection: Visual, Stock Inventor

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROTOR AIDS, INC. (Continued)

U001579850

Tank Num: 004
Container Num: DIESEL
Year Installed: 1980
Tank Capacity: 00001500
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: 3/16" inches
Leak Detection: Visual, Stock Inventor

B6
SSE
1/8-1/4
0.197 mi.
1042 ft.

ROTOR AIDS
2200 TEAL CLUB RD
OXNARD, CA

CA FID UST **S101619941**
SWEEPS UST **N/A**

Site 3 of 10 in cluster B

Relative:
Lower

CA FID UST:
Facility ID: 56004837
Regulated By: UTNKA
Regulated ID: 19514
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 2200 TEAL CLUB RD
Mailing Address 2: Not reported
Mailing City,St,Zip: OXNARD
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Actual:
42 ft.

SWEEPS UST:

Status: Active
Comp Number: 16
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000016-000001
Actv Date: Not reported
Capacity: Not reported
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 4

Status: Active
Comp Number: 16
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ROTOR AIDS (Continued)

S101619941

Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000016-000002
Actv Date: Not reported
Capacity: Not reported
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 16
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000016-000003
Actv Date: Not reported
Capacity: Not reported
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 16
Number: 9
Board Of Equalization: Not reported
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000016-000004
Actv Date: Not reported
Capacity: Not reported
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

B7
SSE
1/8-1/4
0.197 mi.
1042 ft.

PROODOS PROPERTIES INC
2200 TEAL CLUB ROAD
OXNARD, CA
Site 4 of 10 in cluster B

HIST CORTESE **U002244258**
LUST **N/A**
UST
EMI

Relative:
Lower

CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-95076

Actual:
42 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PRODOS PROPERTIES INC (Continued)

U002244258

LUST:

Region: STATE
Global Id: T0611100975
Latitude: 34.202246
Longitude: -119.203847
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/28/1996
Lead Agency: VENTURA COUNTY LOP
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: C-95076
LOC Case Number: 95076
File Location: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Aviation
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0611100975
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Status History:

Global Id: T0611100975
Status: Completed - Case Closed
Status Date: 03/28/1996

Global Id: T0611100975
Status: Open - Case Begin Date
Status Date: 02/08/1995

Global Id: T0611100975
Status: Open - Remediation
Status Date: 11/06/1995

Global Id: T0611100975
Status: Open - Site Assessment
Status Date: 02/08/1995

Global Id: T0611100975
Status: Open - Site Assessment
Status Date: 03/06/1995

Global Id: T0611100975
Status: Open - Verification Monitoring
Status Date: 01/02/1996

Regulatory Activities:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

PROODOS PROPERTIES INC (Continued)

U002244258

Global Id: T0611100975
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0611100975
Action Type: RESPONSE
Date: 01/01/1997
Action: Correspondence

Global Id: T0611100975
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

VENTURA CO. UST:

Facility ID: D 1161
Facility Status: Inactive

EMI:

Year: 1987
County Code: 56
Air Basin: SCC
Facility ID: 1134
Air District Name: VEN
SIC Code: 4212
Air District Name: VENTURA COUNTY APCD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

B8
SSE
1/8-1/4
0.235 mi.
1239 ft.

OXNARD AIR TRAFFIC CONTROL TWR
2889 W 5TH ST
OXNARD, CA 93030
Site 5 of 10 in cluster B

HIST UST **U001579815**
N/A

Relative:
Lower

HIST UST:
Region: STATE
Facility ID: 00000059033
Facility Type: Other
Other Type: AIR TRAFFIC CONTROL
Total Tanks: 0001
Contact Name: CHET ISGAR
Telephone: 8059841420
Owner Name: FAA
Owner Address: 660 W. AVE. "J"
Owner City,St,Zip: LANCASTER, CA 93534

Actual:
41 ft.

Tank Num: 001

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OXNARD AIR TRAFFIC CONTROL TWR (Continued)

U001579815

Container Num: 1
Year Installed: 1960
Tank Capacity: 00000500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual, Stock Inventor

B9
SSE
1/8-1/4
0.235 mi.
1239 ft.

OXNARD AIRPORT
2889 W 5TH ST
OXNARD, CA 93030
Site 6 of 10 in cluster B

NPDES **U001579816**
HIST UST **N/A**
WDS

Relative:
Lower

NPDES:
Npdes Number: CAS000001
Facility Status: Active
Agency Id: 0
Region: 4
Regulatory Measure Id: 192582
Order No: 97-03-DWQ
Regulatory Measure Type: Enrollee
Place Id: Not reported
WDID: 4 56I002776
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 04/02/1992
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Ventura Cnty Dept of Airports
Discharge Address: 555 Airport Way Ste B
Discharge City: Camarillo
Discharge State: California
Discharge Zip: 93010

Actual:
41 ft.

HIST UST:
Region: STATE
Facility ID: 00000056794
Facility Type: Other
Other Type: AIRPORT
Total Tanks: 0005
Contact Name: T.B. IVERSEN
Telephone: 8053884201
Owner Name: DEPARTMENT OF AIRPORTS
Owner Address: 800 SOUTH VICTORIA AVENUE
Owner City,St,Zip: VENTURA, CA 93009

Tank Num: 001
Container Num: W-1
Year Installed: 1976
Tank Capacity: 00000085
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual, 10

Tank Num: 002

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OXNARD AIRPORT (Continued)

U001579816

Container Num: W-2
Year Installed: 1976
Tank Capacity: 00000400
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual, 10

Tank Num: 003
Container Num: W-3
Year Installed: 1976
Tank Capacity: 00000100
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: Visual, 10

Tank Num: 004
Container Num: A-1
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: 1/4 inches
Leak Detection: Visual, 10

Tank Num: 005
Container Num: A-2
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: 1/4 inches
Leak Detection: Visual, 10

CA WDS:

Facility ID: 4 561002776
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 4
Facility Telephone: 8053884200
Facility Contact: Scott Smith/Christ Hastert
Agency Name: VENTURA CO DEPT OF AIRPORTS
Agency Address: Not reported
Agency City,St,Zip: 0
Agency Contact: Not reported
Agency Telephone: Not reported
Agency Type: County
SIC Code: 4581
SIC Code 2: 4512
Primary Waste: Stormwater Runoff
Primary Waste Type: Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD,

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

OXNARD AIRPORT (Continued)

U001579816

Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category.

Secondary Waste: Not reported
 Secondary Waste Type: Not reported
 Design Flow: 0
 Baseline Flow: 0
 Reclamation: No reclamation requirements associated with this facility.
 POTW: The facility is not a POTW.
 Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

B10
SSE
 1/8-1/4
 0.235 mi.
 1239 ft.

VCO OXNARD AIRPORT-HANGAR III
2889 5TH ST
OXNARD, CA
Site 7 of 10 in cluster B

HIST CORTESE
LUST
ENF

S101305808
N/A

Relative:
Lower

CORTESE:
 Region: CORTESE
 Facility County Code: 56
 Reg By: LTNKA
 Reg Id: C-89169

Actual:
41 ft.

Region: CORTESE
 Facility County Code: 56
 Reg By: LTNKA
 Reg Id: C-88114

LUST:

Region: STATE
 Global Id: T0611100354
 Latitude: 34.198155348667
 Longitude: -119.199814796448
 Case Type: LUST Cleanup Site
 Status: Completed - Case Closed
 Status Date: 03/09/2012
 Lead Agency: VENTURA COUNTY LOP
 Case Worker: DBW
 Local Agency: VENTURA COUNTY LOP
 RB Case Number: 88114
 LOC Case Number: 88114
 File Location: Not reported
 Potential Media Affect: Other Groundwater (uses other than drinking water)
 Potential Contaminants of Concern: Gasoline
 Site History: BLANK

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0611100354
Contact Type: Local Agency Caseworker
Contact Name: DIANE B. WAHL
Organization Name: VENTURA COUNTY LOP
Address: 800 S. VICTORIA AVE.
City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

Global Id: T0611100354
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Status History:

Global Id: T0611100354
Status: Completed - Case Closed
Status Date: 03/09/2012

Global Id: T0611100354
Status: Open - Case Begin Date
Status Date: 08/26/1988

Global Id: T0611100354
Status: Open - Remediation
Status Date: 06/07/2002

Global Id: T0611100354
Status: Open - Site Assessment
Status Date: 08/26/1988

Global Id: T0611100354
Status: Open - Site Assessment
Status Date: 10/05/1988

Global Id: T0611100354
Status: Open - Site Assessment
Status Date: 01/26/1990

Global Id: T0611100354
Status: Open - Verification Monitoring
Status Date: 06/22/2010

Regulatory Activities:

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 06/23/2005
Action: * No Action - #5

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	07/09/2007
Action:	Technical Correspondence / Assistance / Other - #21
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	05/23/2006
Action:	Technical Correspondence / Assistance / Other - #9
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	05/24/2006
Action:	Technical Correspondence / Assistance / Other - #10
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	10/30/2006
Action:	Technical Correspondence / Assistance / Other - #15
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	03/12/2012
Action:	Closure/No Further Action Letter
Global Id:	T0611100354
Action Type:	RESPONSE
Date:	12/31/2009
Action:	Final Remedial Action Report / Corrective Action Report
Global Id:	T0611100354
Action Type:	RESPONSE
Date:	07/29/2011
Action:	Monitoring Report - Semi-Annually
Global Id:	T0611100354
Action Type:	RESPONSE
Date:	03/14/2011
Action:	Correspondence
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Soil Vapor Extraction (SVE)
Global Id:	T0611100354
Action Type:	RESPONSE
Date:	12/31/2009
Action:	Well Installation Workplan
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	02/24/2011
Action:	Staff Letter
Global Id:	T0611100354
Action Type:	Other

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Date: 01/01/1950
Action: Leak Reported

Global Id: T0611100354
Action Type: RESPONSE
Date: 03/03/2011
Action: Correspondence

Global Id: T0611100354
Action Type: REMEDIATION
Date: 01/01/1950
Action: In Situ Physical/Chemical Treatment (other than SVE)

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 08/26/2008
Action: Meeting

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 06/15/2009
Action: Staff Letter

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 11/10/2009
Action: Staff Letter

Global Id: T0611100354
Action Type: RESPONSE
Date: 11/30/2006
Action: Other Workplan

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/14/2011
Action: Other Report / Document

Global Id: T0611100354
Action Type: RESPONSE
Date: 12/16/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0611100354
Action Type: RESPONSE
Date: 03/15/2012
Action: Well Destruction Report

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 12/06/2010
Action: Staff Letter

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 03/20/2006
Action: * Historical Enforcement - #8

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 11/30/2006
Action: Technical Correspondence / Assistance / Other - #16

Global Id: T0611100354
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T0611100354
Action Type: RESPONSE
Date: 01/14/2011
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0611100354
Action Type: RESPONSE
Date: 10/20/2006
Action: Other Workplan

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 08/30/2006
Action: Technical Correspondence / Assistance / Other - #13

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 06/05/2006
Action: Technical Correspondence / Assistance / Other - #11

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 05/22/2007
Action: Technical Correspondence / Assistance / Other - #20

Global Id: T0611100354
Action Type: RESPONSE
Date: 10/30/2008
Action: Remedial Progress Report

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/17/2006
Action: Other Report / Document

Global Id: T0611100354
Action Type: RESPONSE
Date: 06/30/2010
Action: Well Installation Report

Global Id: T0611100354
Action Type: RESPONSE
Date: 05/16/2008
Action: Other Report / Document

Global Id: T0611100354
Action Type: ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Date: 09/10/2003
Action: File review - #2

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 10/05/2009
Action: Staff Letter

Global Id: T0611100354
Action Type: RESPONSE
Date: 01/30/2009
Action: Monitoring Report - Semi-Annually

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/23/2007
Action: Other Report / Document

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 07/05/2006
Action: Technical Correspondence / Assistance / Other - #12

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 08/24/2010
Action: Staff Letter

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 07/22/2011
Action: Staff Letter

Global Id: T0611100354
Action Type: RESPONSE
Date: 10/31/2007
Action: Other Workplan

Global Id: T0611100354
Action Type: RESPONSE
Date: 02/15/2007
Action: CAP/RAP - Other Report

Global Id: T0611100354
Action Type: RESPONSE
Date: 06/19/2006
Action: Other Workplan

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 02/19/2008
Action: Technical Correspondence / Assistance / Other - #24

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 06/25/2008
Action: Meeting - #28

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	07/08/2008
Action:	File review
Global Id:	T0611100354
Action Type:	RESPONSE
Date:	04/30/2010
Action:	Monitoring Report - Quarterly
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Pump & Treat (P&T) Groundwater
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Free Product Removal
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0611100354
Action Type:	REMEDIATION
Date:	01/01/1950
Action:	Excavation
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	05/01/2008
Action:	Technical Correspondence / Assistance / Other - #26
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	05/27/2008
Action:	* No Action - #27
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	11/14/2005
Action:	* Historical Enforcement - #7
Global Id:	T0611100354
Action Type:	ENFORCEMENT
Date:	01/23/2007
Action:	Technical Correspondence / Assistance / Other - #17
Global Id:	T0611100354
Action Type:	ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Date: 02/22/2007
Action: Technical Correspondence / Assistance / Other - #18

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 08/08/2007
Action: Meeting - #22

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 09/04/2007
Action: Technical Correspondence / Assistance / Other - #23

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 03/15/2007
Action: Meeting - #19

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 04/22/2008
Action: Technical Correspondence / Assistance / Other - #25

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 11/21/2011
Action: Staff Letter

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 01/01/2017
Action: File review

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 04/12/2010
Action: Staff Letter

Global Id: T0611100354
Action Type: RESPONSE
Date: 12/09/2005
Action: Other Report / Document

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/14/2006
Action: Other Report / Document

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 03/30/2005
Action: * Historical Enforcement - #4

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 01/01/2005
Action: * Historical Enforcement - #3

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 10/03/2006
Action: Technical Correspondence / Assistance / Other - #14

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 09/03/2008
Action: Staff Letter

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 08/26/1988
Action: * Historical Enforcement - #1

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 07/28/2005
Action: * Historical Enforcement - #6

Global Id: T0611100354
Action Type: ENFORCEMENT
Date: 07/18/2011
Action: LOP Case Closure Summary to RB

Global Id: T0611100354
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0611100354
Action Type: RESPONSE
Date: 04/06/2007
Action: CAP/RAP - Feasibility Study Report

Global Id: T0611100354
Action Type: RESPONSE
Date: 02/15/2005
Action: Other Workplan

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/30/2008
Action: Monitoring Report - Quarterly

Global Id: T0611100354
Action Type: RESPONSE
Date: 07/30/2008
Action: Remedial Progress Report

Global Id: T0611100354
Action Type: RESPONSE
Date: 10/29/2010
Action: Monitoring Report - Quarterly

Region: STATE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Global Id: T0611100567
Latitude: 34.1968603
Longitude: -119.1360281
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/10/2001
Lead Agency: VENTURA COUNTY LOP
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: C-89169
LOC Case Number: 89169
File Location: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0611100567
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Status History:

Global Id: T0611100567
Status: Completed - Case Closed
Status Date: 01/10/2001

Global Id: T0611100567
Status: Open - Case Begin Date
Status Date: 11/04/1989

Global Id: T0611100567
Status: Open - Site Assessment
Status Date: 11/04/1989

Global Id: T0611100567
Status: Open - Site Assessment
Status Date: 11/06/1989

Global Id: T0611100567
Status: Open - Site Assessment
Status Date: 10/20/1990

Regulatory Activities:

Global Id: T0611100567
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0611100567
Action Type: ENFORCEMENT

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Date: 01/29/2001
Action: Closure/No Further Action Letter

Global Id: T0611100567
Action Type: ENFORCEMENT
Date: 11/06/1989
Action: * Historical Enforcement

Global Id: T0611100567
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

LUST REG 4:

Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-89169
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 89169
Case Type: Groundwater
Abatement Method Used at the Site: ETED
Global ID: T0611100567
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: CLOS
Date Leak Discovered: 11/4/1989
Date Leak First Reported: 11/4/1989
Date Leak Record Entered: Not reported
Date Confirmation Began: 11/6/1989
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 1/10/2001
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 4799.4475118667571159980656828
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 11/4/1989
Preliminary Site Assessment Began: 10/20/1990
Pollution Characterization Began: 10/20/1990
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: 11/6/1989
Historical Max MTBE Date: 11/1/1996
Hist Max MTBE Conc in Groundwater: 4.2
Hist Max MTBE Conc in Soil: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	VTA CO DEPT OF AIRPORTS
RP Address:	Not reported
Program:	LUST
Lat/Long:	34.1977157 / -1
Local Agency Staff:	KCK
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported
Region:	4
Regional Board:	04
County:	Ventura
Facility Id:	C-88114
Status:	Remedial action (cleanup) Underway
Substance:	Gasoline
Substance Quantity:	Not reported
Local Case No:	88114
Case Type:	Groundwater
Abatement Method Used at the Site:	ETED
Global ID:	T0611100354
W Global ID:	Not reported
Staff:	UNK
Local Agency:	56000L
Cross Street:	Not reported
Enforcement Type:	FREV
Date Leak Discovered:	8/26/1988
Date Leak First Reported:	8/26/1988
Date Leak Record Entered:	Not reported
Date Confirmation Began:	8/26/1988
Date Leak Stopped:	Not reported
Date Case Last Changed on Database:	Not reported
Date the Case was Closed:	Not reported
How Leak Discovered:	Not reported
How Leak Stopped:	Not reported
Cause of Leak:	Not reported
Leak Source:	Not reported
Operator:	Not reported
Water System:	Not reported
Well Name:	Not reported
Approx. Dist To Production Well (ft):	4799.4475118667571159980656828
Source of Cleanup Funding:	F
Preliminary Site Assessment Workplan Submitted:	10/5/1988
Preliminary Site Assessment Began:	1/26/1990
Pollution Characterization Began:	1/26/1990
Remediation Plan Submitted:	Not reported
Remedial Action Underway:	6/7/2002
Post Remedial Action Monitoring Began:	Not reported
Enforcement Action Date:	8/26/1988
Historical Max MTBE Date:	3/26/2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Hist Max MTBE Conc in Groundwater: 1490
Hist Max MTBE Conc in Soil: 207000
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: =
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: VTA CO DEPT OF AIRPORTS
RP Address: Not reported
Program: LUST
Lat/Long: 34.1977157 / -1
Local Agency Staff: KCK
Beneficial Use: AGR, MUN
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:

Region: VENTURA
Facility ID: 88114
Status: Remedial action (cleanup) Underway

ENF:

Region: 4
Facility Id: 246922
Agency Name: Ventura Cnty Dept of Airports
Place Type: Facility
Place Subtype: Not reported
Facility Type: All other facilities
Agency Type: County Agency
Of Agencies: 1
Place Latitude: 34.197577
Place Longitude: -119.210846
SIC Code 1: 4581
SIC Desc 1: Airports, Flying Fields, and Airport Terminal Services
SIC Code 2: 4512
SIC Desc 2: Air Transportation, Scheduled
SIC Code 3: Not reported
SIC Desc 3: Not reported
NAICS Code 1: Not reported
NAICS Desc 1: Not reported
NAICS Code 2: Not reported
NAICS Desc 2: Not reported
NAICS Code 3: Not reported
NAICS Desc 3: Not reported
Of Places: 1
Source Of Facility: Reg Meas
Design Flow: Not reported
Threat To Water Quality: Not reported
Complexity: Not reported
Pretreatment: Not reported
Facility Waste Type: Not reported
Facility Waste Type 2: Not reported
Facility Waste Type 3: Not reported

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

VCO OXNARD AIRPORT-HANGAR III (Continued)

S101305808

Facility Waste Type 4:	Not reported
Program:	AGT
Program Category1:	TANKS
Program Category2:	TANKS
# Of Programs:	1
WDID:	4CUPA000228
Reg Measure Id:	169437
Reg Measure Type:	Unregulated
Region:	4
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Never Active
Status Date:	02/20/2013
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	241301
Region:	4
Order / Resolution Number:	SEL
Enforcement Action Type:	Staff Enforcement Letter
Effective Date:	02/25/2002
Adoption/Issuance Date:	02/25/2002
Achieve Date:	Not reported
Termination Date:	02/25/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Notice of Noncompliance sent 2/25/02 for no SPCC onsite - 4CUPA000228
Description:	Notice of Noncompliance sent 2/25/02 for failure to have a SPCC onsite.
Program:	AGT
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability \$ Amount:	0
Project \$ Amount:	0
Liability \$ Paid:	0
Project \$ Completed:	0
Total \$ Paid/Completed Amount:	0

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

B11 **VENTURA COUNTY DEPARTMENT OF AIRPORTS**
SSE **2889 FIFTH STREET**
1/8-1/4 **OXNARD, CA 93030**
0.235 mi.
1239 ft. **Site 8 of 10 in cluster B**

UST **U004066761**
N/A

Relative: **UST:**
Lower Facility ID: 065-013-056416
 Latitude: 34.197425
Actual: Longitude: -119.197709
41 ft.

B12 **VENTURA CO. OXNARD AIRPORT**
SSE **2889 W 5TH ST**
1/8-1/4 **OXNARD, CA 93030**
0.235 mi.
1239 ft. **Site 9 of 10 in cluster B**

CA FID UST **S101596354**
SWEEPS UST **N/A**

Relative: **CA FID UST:**
Lower Facility ID: 56001693
 Regulated By: UTNKA
Actual: Regulated ID: Not reported
41 ft. Cortese Code: Not reported
 SIC Code: Not reported
 Facility Phone: Not reported
 Mail To: Not reported
 Mailing Address: 2889 W 5TH ST
 Mailing Address 2: Not reported
 Mailing City,St,Zip: OXNARD 93030
 Contact: Not reported
 Contact Phone: Not reported
 DUNs Number: Not reported
 NPDES Number: Not reported
 EPA ID: Not reported
 Comments: Not reported
 Status: Active

SWEEPS UST:
 Status: Active
 Comp Number: 739
 Number: 9
 Board Of Equalization: 44-030692
 Referral Date: 09-30-92
 Action Date: 09-30-92
 Created Date: 02-29-88
 Tank Status: A
 Owner Tank Id: Not reported
 Swrcb Tank Id: 56-000-000739-000001
 Actv Date: Not reported
 Capacity: 12000
 Tank Use: M.V. FUEL
 Stg: P
 Content: LEADED
 Number Of Tanks: 5

 Status: Active
 Comp Number: 739
 Number: 9
 Board Of Equalization: 44-030692
 Referral Date: 09-30-92

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VENTURA CO. OXNARD AIRPORT (Continued)

S101596354

Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000739-000002
Actv Date: Not reported
Capacity: 12000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 739
Number: 9
Board Of Equalization: 44-030692
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000739-000003
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 739
Number: 9
Board Of Equalization: 44-030692
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000739-000004
Actv Date: Not reported
Capacity: 10000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 739
Number: 9
Board Of Equalization: 44-030692
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000739-000005
Actv Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VENTURA CO. OXNARD AIRPORT (Continued)

S101596354

Capacity: 400
Tank Use: OIL
Stg: W
Content: Not reported
Number Of Tanks: Not reported

**B13
SSE
1/8-1/4
0.235 mi.
1239 ft.**

**V-OXNARD AIRPORT FUEL FARM
2889 5TH ST
OXNARD, CA**

**HIST CORTESE
LUST S103066235
N/A**

Site 10 of 10 in cluster B

**Relative:
Lower**

CORTESE:
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2236002

**Actual:
41 ft.**

LUST:
Region: STATE
Global Id: T0606500932
Latitude: 33.6831409
Longitude: -116.1768474
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/08/1999
Lead Agency: RIVERSIDE COUNTY LOP
Case Worker: RIV
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2236002
LOC Case Number: 89169
File Location: Local Agency Warehouse
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0606500932
Contact Type: Regional Board Caseworker
Contact Name: Phan Le
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73720 FRED WARING DRIVE SUITE #100
City: PALM DESERT
Email: ple@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500932
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: 3880 LEMON ST SUITE 200
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

V-OXNARD AIRPORT FUEL FARM (Continued)

S103066235

Status History:

Global Id: T0606500932
Status: Completed - Case Closed
Status Date: 12/08/1999

Global Id: T0606500932
Status: Open - Case Begin Date
Status Date: 10/01/1986

Global Id: T0606500932
Status: Open - Remediation
Status Date: 08/08/1995

Global Id: T0606500932
Status: Open - Site Assessment
Status Date: 10/11/1986

Global Id: T0606500932
Status: Open - Site Assessment
Status Date: 10/13/1993

Global Id: T0606500932
Status: Open - Site Assessment
Status Date: 05/11/1994

Regulatory Activities:

Global Id: T0606500932
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0606500932
Action Type: ENFORCEMENT
Date: 12/08/1999
Action: Closure/No Further Action Letter - #Riv Co Closure

Global Id: T0606500932
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0606500932
Action Type: ENFORCEMENT
Date: 12/07/1999
Action: File review - #RCDEH Upload Site File 5/5/2010

Global Id: T0606500932
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

LUST REG 7:

Region: 7
Status: 9 - Case Closed
Case Num: 7T2236002

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

V-OXNARD AIRPORT FUEL FARM (Continued)

S103066235

Substance: Diesel fuel oil and additives
 ID: 653
 Global ID: T0606500932
 Lead Agency: Local Agency
 Case Worker: YO

RIVERSIDE CO. LUST:

Region: RIVERSIDE
 Facility ID: 89169
 Employee: Shurlow-LOP
 Site Closed: Yes
 Case Type: Other ground water affected
 Facility Status: closed/action completed

VENTURA CO. LUST:

Region: VENTURA
 Facility ID: 89169
 Status: Case Closed

C14
East
1/4-1/2
0.371 mi.
1959 ft.

F.A. BORCHARD & SONS
1618 DORIS AVE
OXNARD, CA 93030

LUST U001579738
HIST UST N/A

Site 1 of 2 in cluster C

Relative:
Higher

LUST REG 4:
 Region: 4
 Regional Board: 04
 County: Ventura
 Facility Id: C-87067
 Status: Case Closed
 Substance: Gasoline
 Substance Quantity: Not reported
 Local Case No: 87067
 Case Type: Groundwater
 Abatement Method Used at the Site: Excavate and Treat
 Global ID: T0611100208
 W Global ID: Not reported
 Staff: UNK
 Local Agency: 56000L
 Cross Street: Not reported
 Enforcement Type: EF
 Date Leak Discovered: 6/9/1987
 Date Leak First Reported: 6/9/1987
 Date Leak Record Entered: Not reported
 Date Confirmation Began: 7/1/1988
 Date Leak Stopped: Not reported
 Date Case Last Changed on Database: Not reported
 Date the Case was Closed: 2/9/1998
 How Leak Discovered: Not reported
 How Leak Stopped: Not reported
 Cause of Leak: Not reported
 Leak Source: Not reported
 Operator: Not reported
 Water System: Not reported
 Well Name: Not reported
 Approx. Dist To Production Well (ft): 2377.843836479272394490823504

Actual:
53 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F.A. BORCHARD & SONS (Continued)

U001579738

Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 6/9/1987
Preliminary Site Assessment Began: 9/21/1989
Pollution Characterization Began: 9/21/1989
Remediation Plan Submitted: 4/20/1990
Remedial Action Underway: 3/14/1994
Post Remedial Action Monitoring Began: 1/21/1998
Enforcement Action Date: 6/9/1987
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: F A BORCHARD & SONS
RP Address: Not reported
Program: LUST
Lat/Long: 34.2082616 / -1
Local Agency Staff: EHD
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:

Region: VENTURA
Facility ID: 87067
Status: Case Closed

HIST UST:

Region: STATE
Facility ID: 00000027807
Facility Type: Other
Other Type: FARMING
Total Tanks: 0002
Contact Name: RALPH W. BORCHARD
Telephone: 8059846974
Owner Name: F.A. BORCHARD & SONS
Owner Address: P.O. BOX 1372
Owner City,St,Zip: OXNARD, CA 93032

Tank Num: 001
Container Num: #1
Year Installed: Not reported
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: #2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

F.A. BORCHARD & SONS (Continued)

U001579738

Year Installed: Not reported
Tank Capacity: 00003000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Visual

**C15
East
1/4-1/2
0.371 mi.
1959 ft.**

**F.A. BORCHARD & SONS
1618 DORIS
OXNARD, CA 93030**

**HIST CORTESE
LUST S102429616
N/A**

Site 2 of 2 in cluster C

**Relative:
Higher**

CORTESE:
Region: CORTESE
Facility County Code: 56
Reg By: LTNKA
Reg Id: C-87067

**Actual:
53 ft.**

LUST:

Region: STATE
Global Id: T0611100208
Latitude: 34.2083605
Longitude: -119.1960117
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 02/09/1998
Lead Agency: VENTURA COUNTY LOP
Case Worker: Not reported
Local Agency: Not reported
RB Case Number: C-87067
LOC Case Number: 87067
File Location: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0611100208
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Status History:

Global Id: T0611100208
Status: Completed - Case Closed
Status Date: 02/09/1998

Global Id: T0611100208
Status: Open - Case Begin Date
Status Date: 06/09/1987

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

F.A. BORCHARD & SONS (Continued)

S102429616

Global Id: T0611100208
 Status: Open - Remediation
 Status Date: 04/20/1990

Global Id: T0611100208
 Status: Open - Remediation
 Status Date: 03/14/1994

Global Id: T0611100208
 Status: Open - Site Assessment
 Status Date: 06/09/1987

Global Id: T0611100208
 Status: Open - Site Assessment
 Status Date: 07/01/1988

Global Id: T0611100208
 Status: Open - Site Assessment
 Status Date: 09/21/1989

Global Id: T0611100208
 Status: Open - Verification Monitoring
 Status Date: 01/21/1998

Regulatory Activities:

Global Id: T0611100208
 Action Type: Other
 Date: 01/01/1950
 Action: Leak Reported

Global Id: T0611100208
 Action Type: RESPONSE
 Date: 01/01/1998
 Action: Correspondence

Global Id: T0611100208
 Action Type: ENFORCEMENT
 Date: 06/09/1987
 Action: * Historical Enforcement

Global Id: T0611100208
 Action Type: Other
 Date: 01/01/1950
 Action: Leak Discovery

16
 SE
 1/4-1/2
 0.430 mi.
 2270 ft.

OXNARD CONT SCH
OXNARD, CA

ENVIROSTOR S107736981
N/A

Relative:
Lower

ENVIROSTOR:
 Site Type: Military Evaluation
 Site Type Detailed: FUDS
 Acres: Not reported
 NPL: NO

Actual:
43 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

OXNARD CONT SCH (Continued)

S107736981

Regulatory Agencies: SMBRP
 Lead Agency: SMBRP
 Program Manager: Not reported
 Supervisor: Douglas Bautista
 Division Branch: Cleanup Cypress
 Facility ID: 80000343
 Site Code: Not reported
 Assembly: 44
 Senate: 19
 Special Program: Not reported
 Status: Inactive - Needs Evaluation
 Status Date: 07/01/2005
 Restricted Use: NO
 Site Mgmt. Req.: NONE SPECIFIED
 Funding: DERA
 Latitude: 34.20027
 Longitude: -119.2002
 APN: NONE SPECIFIED
 Past Use: NONE SPECIFIED
 Potential COC: NONE SPECIFIED
 Confirmed COC: NONE SPECIFIED, NONE SPECIFIED
 Potential Description: NONE SPECIFIED
 Alias Name: CA99799F554600
 Alias Type: Federal Facility ID
 Alias Name: J09CA0526
 Alias Type: INPR
 Alias Name: 80000343
 Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Not reported
 Completed Sub Area Name: Not reported
 Completed Document Type: Not reported
 Completed Date: Not reported
 Comments: Not reported

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

17
SE
1/4-1/2
0.448 mi.
2368 ft.

**VEN OAKS PLUMBING
131 MALLARD WAY
OXNARD, CA**

**HIST CORTESE U001579893
LUST N/A
UST
HIST UST**

**Relative:
Higher**

CORTESE:
 Region: CORTESE
 Facility County Code: 56
 Reg By: LTNKA
 Reg Id: C-87033

**Actual:
45 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VEN OAKS PLUMBING (Continued)

U001579893

LUST:

Region: STATE
Global Id: T0611100185
Latitude: 34.2022627
Longitude: -119.1979393
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/10/2006
Lead Agency: VENTURA COUNTY LOP
Case Worker: DBW
Local Agency: VENTURA COUNTY LOP
RB Case Number: C87033
LOC Case Number: 87033
File Location: Not reported
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0611100185
Contact Type: Local Agency Caseworker
Contact Name: DIANE B. WAHL
Organization Name: VENTURA COUNTY LOP
Address: 800 S. VICTORIA AVE.
City: VENTURA
Email: diane.wahl@ventura.org
Phone Number: 8056545040

Global Id: T0611100185
Contact Type: Regional Board Caseworker
Contact Name: DANIEL PIROTTON
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: Not reported
City: R4 UNKNOWN
Email: dpirotton@waterboards.ca.gov
Phone Number: 2135766714

Status History:

Global Id: T0611100185
Status: Completed - Case Closed
Status Date: 05/10/2006

Global Id: T0611100185
Status: Open - Case Begin Date
Status Date: 04/16/1987

Global Id: T0611100185
Status: Open - Remediation
Status Date: 01/15/1989

Global Id: T0611100185
Status: Open - Site Assessment
Status Date: 04/16/1987

Global Id: T0611100185

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VEN OAKS PLUMBING (Continued)

U001579893

Status: Open - Site Assessment
Status Date: 04/20/1987

Global Id: T0611100185
Status: Open - Site Assessment
Status Date: 08/17/1988

Global Id: T0611100185
Status: Open - Site Assessment
Status Date: 10/31/1988

Global Id: T0611100185
Status: Open - Verification Monitoring
Status Date: 11/16/2004

Regulatory Activities:

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 05/10/2006
Action: Closure/No Further Action Letter - #15

Global Id: T0611100185
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0611100185
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0611100185
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0611100185
Action Type: RESPONSE
Date: 11/03/2005
Action: Unknown

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 06/07/2005
Action: LOP Case Closure Summary to RB - #13

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 05/23/2005
Action: * No Action - #12

Global Id: T0611100185
Action Type: Other
Date: 01/01/1950
Action: Leak Stopped

Global Id: T0611100185

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VEN OAKS PLUMBING (Continued)

U001579893

Action Type: RESPONSE
Date: 01/01/2005
Action: Correspondence

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 08/05/2005
Action: * Historical Enforcement - #14

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 09/23/2003
Action: File review

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 12/02/2004
Action: * Historical Enforcement - #10

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 04/16/1987
Action: * Historical Enforcement

Global Id: T0611100185
Action Type: RESPONSE
Date: 01/01/2005
Action: Remedial Progress Report

Global Id: T0611100185
Action Type: REMEDIATION
Date: 01/01/1950
Action: Excavation

Global Id: T0611100185
Action Type: ENFORCEMENT
Date: 01/18/2005
Action: File review - #11

Global Id: T0611100185
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

LUST REG 4:

Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-87033
Status: Pollution Characterization
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 87033
Case Type: Groundwater
Abatement Method Used at the Site: ETED
Global ID: T0611100185

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VEN OAKS PLUMBING (Continued)

U001579893

W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: FREV
Date Leak Discovered: 4/16/1987
Date Leak First Reported: 4/16/1987
Date Leak Record Entered: Not reported
Date Confirmation Began: 4/16/1987
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: Not reported
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 1032.4703326522051015993843973
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 4/20/1987
Preliminary Site Assessment Began: 8/17/1988
Pollution Characterization Began: 10/31/1988
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: 4/16/1987
Historical Max MTBE Date: 3/21/1997
Hist Max MTBE Conc in Groundwater: 300
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: HOV INVESTMENTS
RP Address: Not reported
Program: LUST
Lat/Long: 34.2022627 / -1
Local Agency Staff: KCK
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:

Region: VENTURA
Facility ID: 87033
Status: Case Closed

VENTURA CO. UST:

Facility ID: D 338
Facility Status: Inactive

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

VEN OAKS PLUMBING (Continued)

U001579893

HIST UST:

Region: STATE
Facility ID: 00000020290
Facility Type: Other
Other Type: PLUMBING CONTRACTOR
Total Tanks: 0002
Contact Name: E. J. HERTENSTEIN
Telephone: 8059845566
Owner Name: VEN OAKS PLUMBING INC.
Owner Address: 131 MALLARD WAY
Owner City,St,Zip: OXNARD, CA 93030

Tank Num: 001
Container Num: 1
Year Installed: 1978
Tank Capacity: 00000750
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: None

Tank Num: 002
Container Num: 2
Year Installed: 1978
Tank Capacity: 00000750
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: None

D18
South
1/2-1
0.559 mi.
2951 ft.

CONDOR HELICOPTERS & AVIATION
2899 WEST 5TH STREET
OXNARD, CA 93030
Site 1 of 2 in cluster D

ENVIROSTOR S100930098
N/A

Relative:
Lower

ENVIROSTOR:
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Chatsworth
Facility ID: 56450001
Site Code: Not reported
Assembly: 44
Senate: 19
Special Program: Not reported
Status: Refer: Other Agency
Status Date: 08/15/1995
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 34.19722

Actual:
36 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

CONDOR HELICOPTERS & AVIATION (Continued)

S100930098

Longitude: -119.2036
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED, NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD053875191
Alias Type: EPA Identification Number
Alias Name: 56450001
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/07/1994
Comments: CalSites Validation Program confirms NFA for DTSC.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 07/01/1991
Comments: The Dept received a copy of the law suit, Ventura County vs. Evergreen Int'l, Condor helicopters & Aviation and a number of other companies, who leased the property from County for thir pesticide and herbicide spraying operation. County is suing to recoup their clean-up costs. According to our files, the Dept was not involved in this clean-up. The telephone contact with Greg Smith of Ventura County Environmental Health Dept confirmed that the County had overseen the clean-up activities at the site. He stated he would be forwarding the reports to us. No further action by DHS because the County cleaned up the site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 01/31/1988
Comments: SITE SCREENING DONE PAL RECCOMENDED BASED ON LACK OF INFO.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 08/15/1980
Comments: FACILITY IDENTIFIED ID FROM ASP Q. Q. OPER 1965 TO PRESENT. NO ONSITE DISP. OFF-SITE DISP-LDFL,26919 VENTURA BLVD

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

D19 **WINGFIELD**
South **5TH STREET/PATTERSON ROAD**
1/2-1 **OXNARD, CA 93035**
0.571 mi.
3013 ft. **Site 2 of 2 in cluster D**

VCP **S106568365**
ENVIROSTOR **N/A**

Relative:
Lower

VCP:

Actual:
36 ft.

Facility ID: 56010018
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 33
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Not reported
Supervisor: * Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Site Code: 301222
Assembly: 44
Senate: 19
Special Programs Code: Voluntary Cleanup Program
Status: No Further Action
Status Date: 06/01/2005
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 34.1975 / -119.2065
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS, AGRICULTURAL - ROW CROPS
Potential COC: 30006, 30007, 30008
Confirmed COC: 30006,30007,30008
Potential Description: SOIL, SOIL
Alias Name: 5TH STREET ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: CENTEX HOMES
Alias Type: Alternate Name
Alias Name: WINGFIELD
Alias Type: Alternate Name
Alias Name: 110033620918
Alias Type: EPA (FRS #)
Alias Name: 301222
Alias Type: Project Code (Site Code)
Alias Name: 56010018
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/11/2005
Comments: DTSC issues PEA completion letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/23/2004
Comments: Agreement completed for DTSC to review Preliminary Endangerment Assessment Report and provide comments. PEA report submitted to DTSC.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

WINGFIELD (Continued)

S106568365

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:

Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 33
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: * Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Facility ID: 56010018
Site Code: 301222
Assembly: 44
Senate: 19
Special Program: Voluntary Cleanup Program
Status: No Further Action
Status Date: 06/01/2005
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Responsible Party
Latitude: 34.1975
Longitude: -119.2065
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS, AGRICULTURAL - ROW CROPS
Potential COC: DDD, DDE, DDT
Confirmed COC: DDD, DDE, DDT, DDD, DDE, DDT
Potential Description: SOIL, SOIL
Alias Name: 5TH STREET ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: CENTEX HOMES
Alias Type: Alternate Name
Alias Name: WINGFIELD
Alias Type: Alternate Name
Alias Name: 110033620918
Alias Type: EPA (FRS #)
Alias Name: 301222
Alias Type: Project Code (Site Code)
Alias Name: 56010018
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/11/2005
Comments: DTSC issues PEA completion letter.

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

WINGFIELD (Continued)

S106568365

Completed Area Name: PROJECT WIDE
 Completed Sub Area Name: Not reported
 Completed Document Type: Voluntary Cleanup Agreement
 Completed Date: 04/23/2004
 Comments: Agreement completed for DTSC to review Preliminary Endangerment Assessment Report and provide comments. PEA report submitted to DTSC.

Future Area Name: Not reported
 Future Sub Area Name: Not reported
 Future Document Type: Not reported
 Future Due Date: Not reported
 Schedule Area Name: Not reported
 Schedule Sub Area Name: Not reported
 Schedule Document Type: Not reported
 Schedule Due Date: Not reported
 Schedule Revised Date: Not reported

20
NE
1/2-1
0.697 mi.
3679 ft.

GINA & IVYWOOD DR.
GINA & IVYWOOD DR.
OXNARD, CA 90845

Notify 65 **S100178008**
N/A

Relative:
Higher

Notify 65:
 Date Reported: Not reported
 Staff Initials: Not reported
 Board File Number: Not reported
 Facility Type: Not reported
 Discharge Date: Not reported
 Incident Description: 90845

Actual:
59 ft.

21
North
1/2-1
0.754 mi.
3981 ft.

STANDARD PACIFIC OF VENTURA
2550 W GONZALES RD
OXNARD, CA

FINDS **1000310588**
HIST CORTESE **N/A**
LUST
ENVIROSTOR

Relative:
Higher

FINDS:
 Registry ID: 110002830296

Actual:
57 ft.

Environmental Interest/Information System
 RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CORTESE:
 Region: CORTESE
 Facility County Code: 56
 Reg By: LTNKA
 Reg Id: C-89027

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STANDARD PACIFIC OF VENTURA (Continued)

1000310588

LUST:

Region: STATE
Global Id: T0611100449
Latitude: 34.2193568
Longitude: -119.2005069
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/08/1989
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: YR
Local Agency: Not reported
RB Case Number: C-89027
LOC Case Number: 89027
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0611100449
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Status History:

Global Id: T0611100449
Status: Completed - Case Closed
Status Date: 08/08/1989

Global Id: T0611100449
Status: Open - Case Begin Date
Status Date: 06/27/1988

Global Id: T0611100449
Status: Open - Site Assessment
Status Date: 07/01/1988

Global Id: T0611100449
Status: Open - Site Assessment
Status Date: 08/03/1988

Global Id: T0611100449
Status: Open - Site Assessment
Status Date: 05/09/1989

Regulatory Activities:

Global Id: T0611100449
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STANDARD PACIFIC OF VENTURA (Continued)

1000310588

Global Id: T0611100449
Action Type: ENFORCEMENT
Date: 02/27/1989
Action: * Historical Enforcement

Global Id: T0611100449
Action Type: ENFORCEMENT
Date: 08/08/1989
Action: Closure/No Further Action Letter

Global Id: T0611100449
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

LUST REG 4:

Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-89027
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 89027
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0611100449
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: EF
Date Leak Discovered: 6/27/1988
Date Leak First Reported: 6/27/1988
Date Leak Record Entered: Not reported
Date Confirmation Began: 7/1/1988
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 6/28/1989
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 4148.6042176744192478730508644
Source of Cleanup Funding: S
Preliminary Site Assessment Workplan Submitted: 8/3/1988
Preliminary Site Assessment Began: 5/9/1989
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: 2/27/1989
Historical Max MTBE Date: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

STANDARD PACIFIC OF VENTURA (Continued)

1000310588

Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: STANDARD PACIFIC
RP Address: Not reported
Program: LUST
Lat/Long: 34.2192145 / -1
Local Agency Staff: EHD
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:

Region: VENTURA
Facility ID: 89027
Status: Case Closed

ENVIROSTOR:

Site Type: Historical
Site Type Detailed: * Historical
Acres: 0.2
NPL: NO
Regulatory Agencies: US EPA
Lead Agency: US EPA
Program Manager: Not reported
Supervisor: * Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Facility ID: 56560001
Site Code: 300574
Assembly: 37
Senate: 19
Special Program: EPA - PASI
Status: No Further Action
Status Date: 10/03/1996
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: Not reported
Latitude: 34.26851
Longitude: -119.1668
APN: NONE SPECIFIED
Past Use: DISTRIBUTOR - CHEMICAL
Potential COC: DDT
Confirmed COC: DDT, DDT
Potential Description: SOIL
Alias Name: CAD982492803
Alias Type: EPA Identification Number
Alias Name: 110002830296
Alias Type: EPA (FRS #)
Alias Name: 300574

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

STANDARD PACIFIC OF VENTURA (Continued)

1000310588

Alias Type:	Project Code (Site Code)
Alias Name:	56560001
Alias Type:	Envirostor ID Number
Completed Info:	
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Assessment Report
Completed Date:	09/13/1996
Comments:	A Preliminary Assessment was completed under U.S. EPA grant. The site warrants no further assessment action for either U.S. EPA or DTSC.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Screening
Completed Date:	01/17/1992
Comments:	APPLIED ENVIRONMENTAL TECHNOLOGIES , INC. NOTIFIED DTSC OF VERIFICATION SAMPLING FOLLOWING THE REMOVAL OF DDT.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

22
North
1/2-1
0.757 mi.
3995 ft.

NORTHWEST ELEMENTARY
GONZALES ROAD/PATTERSON ROAD
OXNARD, CA 93030

SCH S107736919
ENVIROSTOR N/A

Relative:
Higher

SCH:

Actual:
55 ft.

Facility ID:	56010010
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	14
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Sandra Karinen
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304015
Assembly:	37
Senate:	19
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	03/06/2001
Restricted Use:	NO
Funding:	School District
Latitude:	34.2254

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHWEST ELEMENTARY (Continued)

S107736919

Longitude: -119.1713
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Chlordane, Chlordane, DDD, DDE, DDT, Endrin, Toxaphene, Endosulfan
Confirmed COC: No Contaminants found
Potential Description: SOIL
Alias Name: AKA: THURGOOD MARSHALL
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEM
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEMENTARY SCHOOL SITE
Alias Type: Alternate Name
Alias Name: OXNARD ELEM. SD-NORTHWEST ELEM. SCH.
Alias Type: Alternate Name
Alias Name: OXNARD SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 300816
Alias Type: Project Code (Site Code)
Alias Name: 304015
Alias Type: Project Code (Site Code)
Alias Name: 56010010
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 05/26/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/06/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 11/24/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/17/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/05/2000
Comments: PEA for Residual Concentrations of Agricultural Chem. in Soil

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHWEST ELEMENTARY (Continued)

S107736919

Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/19/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 12/06/1999
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:

Site Type: School Investigation
Site Type Detailed: School
Acres: 14
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Sandra Karinen
Supervisor: Javier Hinojosa
Division Branch: Southern California Schools & Brownfields Outreach
Facility ID: 56010010
Site Code: 304015
Assembly: 37
Senate: 19
Special Program: Not reported
Status: No Further Action
Status Date: 03/06/2001
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: School District
Latitude: 34.2254
Longitude: -119.1713
APN: NONE SPECIFIED
Past Use: AGRICULTURAL - ROW CROPS
Potential COC: Chlordane, Chlordane, DDD, DDE, DDT, Endrin, Toxaphene, Endosulfan
Confirmed COC: Chlordane, Chlordane, DDD, DDE, DDT, Endrin, Toxaphene, Endosulfan,
No Contaminants found
Potential Description: SOIL
Alias Name: AKA: THURGOOD MARSHALL
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEM
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEMENTARY SCHOOL
Alias Type: Alternate Name
Alias Name: NORTHWEST ELEMENTARY SCHOOL SITE
Alias Type: Alternate Name
Alias Name: OXNARD ELEM. SD-NORTHWEST ELEM. SCH.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHWEST ELEMENTARY (Continued)

S107736919

Alias Type: Alternate Name
Alias Name: OXNARD SCHOOL DISTRICT
Alias Type: Alternate Name
Alias Name: 300816
Alias Type: Project Code (Site Code)
Alias Name: 304015
Alias Type: Project Code (Site Code)
Alias Name: 56010010
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 05/26/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/06/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 11/24/1999
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 07/17/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/05/2000
Comments: PEA for Residual Concentrations of Agricultural Chem. in Soil

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 03/19/2001
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 12/06/1999
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NORTHWEST ELEMENTARY (Continued)

S107736919

Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

23
NNE
1/2-1
0.872 mi.
4605 ft.

**1710 ARLENE
OXNARD, CA 90845**

**Notify 65 S100178037
N/A**

**Relative:
Higher**

Notify 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 90845

**Actual:
61 ft.**

E24
NE
1/2-1
0.929 mi.
4905 ft.

**OXNARD ILS OUTER MARK ANNEX
OXNARD, CA
Site 1 of 2 in cluster E**

**FUDS 1009484712
N/A**

**Relative:
Higher**

FUDS:
Federal Facility ID: CA9799F5548
FUDS #: J09CA0528
INST ID: 61153
Facility Name: OXNARD ILS OUTER MARK ANNEX
City: OXNARD
State: CA
EPA Region: 09
County: VENTURA
Congressional District: 23
US Army District: Los Angeles District (SPL)
Fiscal Year: 2011
Telephone: 213-452-3920
NPL Status: Not Listed
RAB: Not reported
CTC: 12
Current Owner: LOCAL GOVT
Current Prog: Not reported
Future Prog: Not reported
Description: THE AIR FORCE AQUIRED 1.95 ACRES.
THE SITE WAS USED FOR NAVIGATION AIDS FOR OXNARD AIR FORCE BASE. THE
SITE WAS USED FROM 1952 TO 1970.

**Actual:
63 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

E25 **OXNARD ILS OTR MK AX**
NE
1/2-1 **OXNARD, CA**
0.932 mi.
4923 ft. **Site 2 of 2 in cluster E**

ENVIROSTOR **S107736984**
N/A

Relative:
Higher

ENVIROSTOR:

Actual:
63 ft.

Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Facility ID: 80000345
Site Code: Not reported
Assembly: 44
Senate: 19
Special Program: Not reported
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Restricted Use: NO
Site Mgmt. Req.: NONE SPECIFIED
Funding: DERA
Latitude: 34.21722
Longitude: -119.1916
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED, NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA99799F554800
Alias Type: Federal Facility ID
Alias Name: J09CA0528
Alias Type: INPR
Alias Name: 80000345
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Not reported
Completed Sub Area Name: Not reported
Completed Document Type: Not reported
Completed Date: Not reported
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

26
SSW
1/2-1
0.957 mi.
5055 ft.

APARTMENT COMPLEX
1040 KELP LANE
OXNARD, CA 90845

Notify 65 S100178489
N/A

Relative:
Lower

Notify 65:

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Incident Description: 90845

Actual:
32 ft.

Count: 12 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OXNARD	1003878781	WALKER'S VENTURA SALVAGE CITY DUMP	4400 BLOCK VINEYARD AVE	93030	CERC-NFRAP
OXNARD	1003878951	DUNES SUBDIVISION	DUNES ST	93030	CERC-NFRAP
OXNARD	S109281209	COMMANDER NAUMANN DRILL SITE	HAILES & ETTING ROADS	93030	EMI
OXNARD	1006248420	COMMANDER NAUMANN DRILL SITE	HAILES & ETTING ROADS		FINDS, EMI
OXNARD	1010736037	DUNES SUBDIVISION SITE - OXNARD	OXNARD DUNES SUBDIVISION		FINDS
OXNARD	S110655935	COTTAGES OXNARD TRACT 9450- APN #1	PATTERSON RD	93030	LUST
OXNARD	S107454212	COTTAGES OXNARD TRACT 9450- APN #1	PATTERSON RD		LUST
OXNARD	S100779164	OXNARD 1962	PERKINS RD. AND ORMOND BEACH W		SWF/LF
OXNARD	S109521349	CITY OF OXNARD	ROSE AVENUE HWY 101	93030	SLIC
OXNARD	S103878599	NAVARRO SITE	STURGIS	93030	SLIC
OXNARD	1003878694	BAILARD LDFL	VICTORIA RD XING @SN CLARA RIV	93030	CERC-NFRAP
OXNARD	S106539394	WAGON WHEEL AKA: SANTA CLARA (WAGO	2401 VINEYARD AVE.	93030	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/09/2013	Telephone: N/A
Date Made Active in Reports: 07/10/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/08/2013	Telephone: 703-603-8704
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 10/11/2013
Number of Days to Update: 151	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 04/26/2013	Source: EPA
Date Data Arrived at EDR: 05/29/2013	Telephone: 703-412-9810
Date Made Active in Reports: 08/09/2013	Last EDR Contact: 11/11/2013
Number of Days to Update: 72	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/02/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal institutional controls / engineering controls registries

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 06/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2013	Telephone: 703-603-0695
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 104	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 06/17/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/21/2013	Telephone: 703-603-0695
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 104	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/20/2013	Source: Department of the Navy
Date Data Arrived at EDR: 08/23/2013	Telephone: 843-820-7326
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 11/18/2013
Number of Days to Update: 70	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/01/2013	Telephone: 202-267-2180
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 10/01/2013
Number of Days to Update: 66	Next Scheduled EDR Contact: 01/13/2014
	Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/06/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/06/2013	Telephone: 916-323-3400
Date Made Active in Reports: 12/03/2013	Last EDR Contact: 11/06/2013
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/06/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/06/2013	Telephone: 916-323-3400
Date Made Active in Reports: 12/03/2013	Last EDR Contact: 11/06/2013
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/19/2013	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 08/19/2013	Telephone: 916-341-6320
Date Made Active in Reports: 10/08/2013	Last EDR Contact: 11/21/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 10/16/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/17/2013	Telephone: see region list
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Varies

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 10/16/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/17/2013	Telephone: 866-480-1028
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2013	Telephone: 415-972-3372
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/28/2013
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

State and tribal registered storage tank lists

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 10/16/2013	Source: SWRCB
Date Data Arrived at EDR: 10/17/2013	Telephone: 916-341-5851
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-327-5092
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 10/07/2013
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013	Source: EPA Region 9
Date Data Arrived at EDR: 07/30/2013	Telephone: 415-972-3368
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 129	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations).

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 09/28/2012
Date Data Arrived at EDR: 11/07/2012
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 156

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 11/01/2014
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013
Date Data Arrived at EDR: 08/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 92

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 66

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/24/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/24/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/28/2013
Number of Days to Update: 137	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 11/08/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 02/24/2014
	Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/16/2013	Source: Department of Conservation
Date Data Arrived at EDR: 09/19/2013	Telephone: 916-323-3836
Date Made Active in Reports: 10/17/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 28	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 10/23/2013	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 10/29/2013	Telephone: 916-341-6422
Date Made Active in Reports: 12/05/2013	Last EDR Contact: 11/18/2013
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 11/04/2013
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/06/2013	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/11/2013	Telephone: 202-307-1000
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 12/05/2013
Number of Days to Update: 22	Next Scheduled EDR Contact: 03/17/2014
	Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/06/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/06/2013	Telephone: 916-323-3400
Date Made Active in Reports: 12/03/2013	Last EDR Contact: 11/06/2013
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 09/03/2013	Telephone: 916-255-6504
Date Made Active in Reports: 10/10/2013	Last EDR Contact: 12/26/2013
Number of Days to Update: 37	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 11/19/2008	Telephone: 202-307-1000
Date Made Active in Reports: 03/30/2009	Last EDR Contact: 03/23/2009
Number of Days to Update: 131	Next Scheduled EDR Contact: 06/22/2009
	Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009	Source: Department of Public Health
Date Data Arrived at EDR: 09/23/2009	Telephone: 707-463-4466
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 12/02/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 03/17/2014
	Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/06/2013
Date Data Arrived at EDR: 04/25/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 11/13/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 10/08/2013
Date Data Arrived at EDR: 10/15/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 43

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/13/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 12/05/2013
Number of Days to Update: 22

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 76

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/01/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/14/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 34

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 10/30/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 10/16/2013
Date Data Arrived at EDR: 10/17/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 41

Source: State Water Quality Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 10/16/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/17/2013	Telephone: 866-480-1028
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/02/2013	Telephone: (415) 495-8895
Date Made Active in Reports: 12/16/2013	Last EDR Contact: 10/02/2013
Number of Days to Update: 75	Next Scheduled EDR Contact: 01/13/2014
	Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 11/06/2013
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/18/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/27/2014
	Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/07/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 57

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/26/2013
Date Data Arrived at EDR: 06/11/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 143

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/26/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/27/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 11/21/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 11/21/2014
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/08/2012	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/25/2012	Telephone: 202-564-8600
Date Made Active in Reports: 07/10/2012	Last EDR Contact: 10/28/2013
Number of Days to Update: 46	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011	Source: EPA/NTIS
Date Data Arrived at EDR: 02/26/2013	Telephone: 800-424-9346
Date Made Active in Reports: 04/19/2013	Last EDR Contact: 11/25/2013
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/21/2013	Source: Department of Conservation
Date Data Arrived at EDR: 09/17/2013	Telephone: 916-445-2408
Date Made Active in Reports: 10/17/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/19/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/19/2013	Telephone: 916-445-9379
Date Made Active in Reports: 10/08/2013	Last EDR Contact: 11/21/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/30/2013	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 10/01/2013	Telephone: 916-323-3400
Date Made Active in Reports: 11/26/2013	Last EDR Contact: 10/01/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 01/13/2014
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CAL SITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 12/17/2013
Number of Days to Update: 18	Next Scheduled EDR Contact: 04/07/2014
	Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 09/11/2013	Telephone: 916-327-4498
Date Made Active in Reports: 10/16/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 35	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 12/26/2013
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/09/2013	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/13/2013	Telephone: 916-445-9379
Date Made Active in Reports: 10/08/2013	Last EDR Contact: 11/08/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 07/16/2013	Telephone: 916-255-1136
Date Made Active in Reports: 08/26/2013	Last EDR Contact: 10/15/2013
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/27/2014
	Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010	Source: California Air Resources Board
Date Data Arrived at EDR: 06/25/2013	Telephone: 916-322-2990
Date Made Active in Reports: 08/22/2013	Last EDR Contact: 12/26/2013
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/07/2014
	Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/18/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/27/2014
	Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 11/18/2013
Number of Days to Update: 54	Next Scheduled EDR Contact: 02/03/2014
	Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/04/2013
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Quarterly

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: N/A

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/19/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 28

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 11/21/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 10/25/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/12/2013
Date Data Arrived at EDR: 08/20/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 49

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 11/18/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 09/24/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 11/01/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 08/29/2013
Date Data Arrived at EDR: 09/13/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 31

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 30

Source: EPA
Telephone: 202-564-5962
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Annually

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 10/28/2013
Date Data Arrived at EDR: 10/29/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 38

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 11/18/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/15/2013
Date Data Arrived at EDR: 10/15/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 43

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 10/15/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/28/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/26/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A	Source: N/A
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 11/13/2013	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 11/15/2013	Telephone: 510-567-6700
Date Made Active in Reports: 12/16/2013	Last EDR Contact: 12/30/2013
Number of Days to Update: 31	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/25/2013	Source: Alameda County Environmental Health Services
Date Data Arrived at EDR: 07/26/2013	Telephone: 510-567-6700
Date Made Active in Reports: 08/20/2013	Last EDR Contact: 12/30/2013
Number of Days to Update: 25	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2013	Source: Amador County Environmental Health
Date Data Arrived at EDR: 06/21/2013	Telephone: 209-223-6439
Date Made Active in Reports: 08/21/2013	Last EDR Contact: 12/09/2013
Number of Days to Update: 61	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 08/01/2013	Source: Public Health Department
Date Data Arrived at EDR: 08/02/2013	Telephone: 530-538-7149
Date Made Active in Reports: 08/22/2013	Last EDR Contact: 10/09/2013
Number of Days to Update: 20	Next Scheduled EDR Contact: 01/27/2014
	Data Release Frequency: No Update Planned

CALVERAS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 06/20/2013
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 08/09/2013
Number of Days to Update: 39

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 11/15/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List

Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/20/2013
Date Data Arrived at EDR: 08/23/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 46

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

FRESNO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/16/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 42

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 13

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/20/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 28

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

KINGS COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/09/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 10/21/2013
Date Data Arrived at EDR: 10/22/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 36

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 10/22/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/17/2013
Next Scheduled EDR Contact: 11/04/2013
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013	Source: Community Health Services
Date Data Arrived at EDR: 02/21/2013	Telephone: 323-890-7806
Date Made Active in Reports: 03/25/2013	Last EDR Contact: 10/21/2013
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/03/2014
	Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 10/21/2013	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 10/25/2013	Telephone: 310-524-2236
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 10/21/2013
Number of Days to Update: 33	Next Scheduled EDR Contact: 02/03/2014
	Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 10/23/2003	Telephone: 562-570-2563
Date Made Active in Reports: 11/26/2003	Last EDR Contact: 10/28/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/18/2013	Telephone: 310-618-2973
Date Made Active in Reports: 08/20/2013	Last EDR Contact: 10/09/2013
Number of Days to Update: 33	Next Scheduled EDR Contact: 01/27/2014
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/20/2013	Source: Madera County Environmental Health
Date Data Arrived at EDR: 09/24/2013	Telephone: 559-675-7823
Date Made Active in Reports: 10/18/2013	Last EDR Contact: 11/20/2013
Number of Days to Update: 24	Next Scheduled EDR Contact: 03/10/2014
	Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/07/2013	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/09/2013	Telephone: 415-499-6647
Date Made Active in Reports: 11/26/2013	Last EDR Contact: 10/07/2013
Number of Days to Update: 48	Next Scheduled EDR Contact: 01/20/2014
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List

CUPA facility list.

Date of Government Version: 08/23/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 42

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 11/20/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 09/04/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 39

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 09/11/2013
Date Data Arrived at EDR: 09/12/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 32

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 11/20/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List

CUPA facility list.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 27

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 11/04/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/04/2013
Date Data Arrived at EDR: 11/13/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/22/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 49

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/10/2013
Date Data Arrived at EDR: 10/22/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/10/2013
Date Data Arrived at EDR: 10/22/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 10/10/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 47

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/05/2013
Date Data Arrived at EDR: 10/10/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 47

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2012
Date Data Arrived at EDR: 11/06/2012
Date Made Active in Reports: 11/30/2012
Number of Days to Update: 24

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 11/18/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 09/27/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 21

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/26/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 11/20/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 10/01/2013
Date Data Arrived at EDR: 10/08/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 49

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/16/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/16/2013
Date Data Arrived at EDR: 09/17/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 29

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 11/21/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List

Cupa facility list

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/04/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 36

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/03/2013
Date Data Arrived at EDR: 09/06/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 38

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/14/2013
Date Data Arrived at EDR: 08/16/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 53

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 11/08/2013
Next Scheduled EDR Contact: 02/24/2014
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 08/22/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 09/09/2013
Date Data Arrived at EDR: 09/10/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 34

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 11/21/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/20/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/18/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/18/2013
Number of Days to Update: 24

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/01/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 28

Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 08/19/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 11/19/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/07/2013
Next Scheduled EDR Contact: 01/20/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 11/19/2013
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/03/2014
	Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 10/02/2013	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/30/2013	Telephone: 805-654-2813
Date Made Active in Reports: 11/27/2013	Last EDR Contact: 10/28/2013
Number of Days to Update: 28	Next Scheduled EDR Contact: 02/11/2014
	Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 08/29/2013	Source: Environmental Health Division
Date Data Arrived at EDR: 09/18/2013	Telephone: 805-654-2813
Date Made Active in Reports: 10/16/2013	Last EDR Contact: 12/16/2013
Number of Days to Update: 28	Next Scheduled EDR Contact: 03/31/2014
	Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 09/24/2013	Source: Yolo County Department of Health
Date Data Arrived at EDR: 10/01/2013	Telephone: 530-666-8646
Date Made Active in Reports: 11/26/2013	Last EDR Contact: 12/17/2013
Number of Days to Update: 56	Next Scheduled EDR Contact: 04/07/2014
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 08/01/2013	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 08/05/2013	Telephone: 530-749-7523
Date Made Active in Reports: 08/22/2013	Last EDR Contact: 12/06/2013
Number of Days to Update: 17	Next Scheduled EDR Contact: 02/17/2014
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 11/22/2013
Next Scheduled EDR Contact: 03/03/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/18/2013
Next Scheduled EDR Contact: 01/27/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 11

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/07/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/21/2013
Next Scheduled EDR Contact: 02/03/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: Rextag Strategies Corp.
Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

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