



ADDENDUM NO. 2

To the Contract Documents for:
TUSD Kimball High School – 2-Story CR Building – Increment 1
Tracy Unified School District

August 31, 2026

This addendum shall supersede all previously issued documents including but not limited to specifications, addenda, and drawings. All other conditions remain unchanged. The following clarifications, changes, modifications, corrections, and/or additions as set forth herein shall apply to the above documents and shall be made a part thereof and shall be subject to all the requirements thereof as though originally specified and/or shown.

Item No. 1.1 Information Items:

- 1.1.1 Pre-Bid Conference Sign-in Sheet:** The Pre-Bid Conference Sign-In Sheet, dated August 26, 2026, is attached for reference.
- 1.1.2 Hazardous Building Materials Survey Report:** The Hazardous Building Materials Survey Report, dated July 14, 2026, is attached for reference.
- 1.1.3 Geotechnical Report:** The Geotechnical Report is attached for reference.
- 1.1.4 Responsibility Matrix:** The Responsibility Matrix is attached for reference.
- 1.1.5 Engineer's Estimate:** Estimated Base Bid construction cost is ~\$2.8M. Alternate 1 – Fencing is ~\$1.1M. Alternate 2 – Low Voltage is ~\$350k.
- 1.1.6 Contractor Questionnaire:** Responses to Contractor Questionnaire are **not** required.

Item No 1.2 Additional Clarifications:

1.2.1 Pre-Bid RFI Responses

Question #1: Is the fence scope within the building site improvements a part of the ad alt? Or is it to be included in the base bid?

Answer #1: All fencing is apart of Bid Alternate 1.

Question #2: Two different workmanship warranties are called out in the specs, please clarify if 1 year or 2 years.

Answer #2: The workmanship warranty is 2 years.

Question #3: Is there supplemental hardware for the gates if ad alt 2 is not to proceed? The hardware spec calls for electronic, but the low voltage hook up to the gates is covered under ad alt 2 while fencing and gates is ad alt 1. Should the ad alts be priced: Ad Alt 1 supplemental nonelectric hardware / Ad alt 2 with the electric hardware?

Answer #3: All supplemental hardware and appurtenances related to the fencing shall be a part of the fencing alternate.

Question #4: The specs call out low voltage work in Ad alt 2 to be completed by 10/29/2027. Will trenching and conduit placement be able to be performed when school goes into session, or is the trenching/conduit placement expected to be completed by the return of the students?

Answer #4: The infrastructure for all low voltage pathways at the site needs to be completed for the pad completion millstone coordinate all work on an occupied campus see DIV 00 and DIV 01 for requirements

Question #5: Please confirm if all Trenching for Ad alt 2 will require concrete removed to the nearest joint.

Answer #5: Concrete will be removed to the nearest joint if joint is within 18 inches of the nearest trench.

Question #6: Please confirm if grass restoration for staging area will need to have a maintenance period. Please confirm the duration.

Answer #6: The obligation for grass restoration shall be to provide soil amendments and fertilizer and reseeding and any fine grading to repair disturbed grass area re connect sprinkler heads and test irrigation with District prior to completion no further maintenance is required.

Question #7: Electrical Conduits and Sewer are shown to run through bus lane, Please confirm if this work falls under Fire lane work or Building prep milestone. Building Prep milestone states utilities.

Answer #7: Utilities within the fire lane work to be provided within the fire lane milestone. Building utilities for the building outside the fire lane shall be provide shall be provided within the building prep milestone.

Question #8. Please confirm scope of work is detailed in V2 plans and specs. V1 plans and specs are given for reference, or is that part of the scope?

Answer #8: The scope of work constitutes DWG V1 DWG V2 Spcs V1 and spcs V2.

Please reference Exhibit R the link below to access additional Pre-Bid RFI Responses.

<https://www.dropbox.com/scl/fo/b3q5zm117rsd63dm48h07/AEUN1rHmSrKttIDxUYByJs?rlkey=ljacrxysqp6yk25n4dlxzd13w&st=nfhvyx0l&dl=0>

1.2.2 Additional Revisions & Documents

Please reference Exhibit S in the link below to access Additional Revisions & Documents.

<https://www.dropbox.com/scl/fo/b3q5zm117rsd63dm48h07/AEUN1rHmSrKttIDxUYByJs?rlkey=ljacrxysqp6yk25n4dlxzd13w&st=nfhvyx0l&dl=0>

Attachments: Pre-Bid Conference Sign-in Sheet dated August 26, 2026
Hazardous Building Materials Survey Report
NA255078 – Kimball High School Classroom Geotechnical Engineering Report
Kimball HS 2-Story Increment 1 & Increment 2 Responsibility Matrix
Exhibit R– Pre-Bid RFI Responses
Exhibit S – Additional Revisions and Documents

[END OF ADDENDUM 02]

Tracy Unified School District

Project: TUSD Kimball High School - 2-Story CR Building Increment 1

Mandatory Pre Bid Conference and Site Visit
Wednesday, August 26, 2026 at 10:00am

Sign - in - Sheet



NAME	COMPANY	PHONE	EMAIL
Eloy Vento	Tracy USD		
Jason Rodrigues	Tracy USD		
Rich Dunlap	Pro-K12		
Ayana Toliver	Pro-K12		
Brad Saiz	Silicon Valley Paving	408 857 8058	bradsaiz@svpinc.com
Katie Menghetti	Menghetti Constr.	(209) 652-1041	charlie@menghetti.com
Ernan Cuellar	Bobo Construction Inc	916-383-7777	bestimating@bobconstructioninc.com
Matt DeWils	Summit Plumbing	209-652-9270	matt@summitpminc.com



July 14, 2026

Hazardous Building Materials Survey Report

**Rooms I-1 & I-2 Demolition Survey
Kimball High School
3200 Jaguar Run
Tracy, CA 95377**

Prepared for:

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Facilities and Planning
Tracy Unified School District
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Prepared By:

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FACS Project #PJ92843

Contents

List of Acronyms.....	1
Executive Summary	2
Introduction.....	3
Scope of Work	3
Site Characterization.....	3
Survey Methods	3
Regulations	5
Findings and Recommendations.....	8
Limitations	8

**Appendix A: Asbestos Survey Summary,
Sample Chain-of-Custody and Laboratory
Results Report**

**Appendix B: Lead Paint Chip Summary, Sample
Chain-of-Custody, Laboratory Results
Report, and CDPH 8552 Form**

**Appendix C: Site Photos and Sample Location
Drawings**

**Appendix D: Certifications of Personnel and
Laboratories**

List of Acronyms

AAS	Atomic Absorption Spectroscopy
ACBM	Asbestos-Containing Building Material
ACCM	Asbestos-Containing Construction Material
ACM	Asbestos-Containing Material
AHERA	Asbestos Hazard Emergency Response Act
AIHA	American Industrial Hygiene Association
CAC	California - Certified Asbestos Consultant
Cal/OSHA	California Occupational Safety and Health Association
CCR	Code of California Regulations
CFR	Code of Federal Regulation
CSST	California – Certified Site Surveillance Technician
DOSH	Department of Occupational Safety and Health
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency (EPA)
FACS	Forensic Analytical Consulting Services, Inc.
ICP	Inductively Coupled Plasma
LCP	Lead-Containing Paint
LBP	Lead-Based Paint
ND	None Detected
NESHAP	National Emissions Standard Hazardous Air Pollutants
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Science and Technology
NVLAP	National Voluntary Laboratory Accreditation Program
PCM	Phase Contrast Microscopy
PLM	Polarized Light Microscopy
TEM	Transmission Electron Microscopy
TTL	Total Threshold Limit Concentration
XRF	X-Ray Fluorescence Spectrum Analyzer
<	Less Than Reporting Limit

Executive Summary

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Tracy Unified School district to perform an asbestos and lead paint survey of rooms I1 and I2 of Kimball High School, located at 3200 Jaguar Run in Tracy, California. The survey included any suspect asbestos-containing materials (ACM) and suspect lead-containing paints and coatings which may be disturbed during the planned demolition project. A summary list of suspect asbestos-containing materials which were identified and sampled is included in Appendix A of this report. A table reporting suspect lead-containing paints or coatings which were identified and sampled is included in Appendix B of this report. The survey was performed on June 30, 2026.

Asbestos

The following suspect materials were sampled during this survey and identified to **not contain** asbestos by laboratory analysis:

- **12" Vinyl Floor Tile and Mastic – Beige Oatmeal**
- **4" Baseboard and Mastic – Brown**
- **Tackboard on Drywall**
- **2'x4' False Ceiling Panel - Fiberglass**
- **Foil Tape**
- **4" Baseboard and Mastic – Beige**
- **2'x4' False Ceiling Panel – Pinhole Fissure**
- **Siding Sealant**
- **Base Sealant**
- **Bolt Mastic**

Please see Appendix A for a complete listing of materials sampled from the work areas and results from this survey. Any suspect materials not included must be assumed to be asbestos-containing materials until tested and proven not to contain asbestos.

Lead

The following paints/coatings did **not contain** detectable concentrations of lead above the laboratory's reporting limit:

- **Beige Paint on Wood Siding**
- **Red Paint on Wood Window Frame**
- **Red Paint on Metal Door Frame**

Please see Appendix B for a complete listing of paint / coating sample data from the work areas and results from this survey. Any paints not included in the survey, must be handled as lead-containing unless sampled and proven otherwise.

FACS recommends that the results of this report be incorporated into any demolition plans provided for this project for informational purposes.

Introduction

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Tracy Unified School district to perform an asbestos and lead paint survey in rooms I1 and I2 of Kimball High School, located at 3200 Jaguar Run in Tracy, California. The survey included any suspect asbestos-containing materials (ACM) and suspect paints and coatings which may be disturbed during the planned demolition project. The survey was performed on June 30, 2026.

Scope of Work

The purpose of this survey was to identify asbestos-containing materials (ACMs) and lead-containing paints and coatings which may be disturbed during the upcoming demolition project. The visual inspection, bulk sampling, and survey documentation were performed by Trevor Leitz and Eric Stockel. Mr. Leitz is a Division of Occupational Safety and Health (DOSH) Certified Site Surveillance Technician (CSST #19-6682) and Mr. Stockel is a U.S. EPA Accredited AHERA Building Inspector. Both Mr. Leitz and Mr. Stockel are California Department of Public Health (CDPH) Certified Lead Sampling Technicians (LRC-00003432, LRC-00014855). All work was completed under the supervision and direction of Chris Chipponeri, who is a DOSH Certified Asbestos Consultant (CAC #10-4633) and CDPH Certified Lead Inspector/Assessor (LRC-00000782), as required under California regulations. The scope of the survey and the services provided by FACS included:

- Performing a visual inspection of the project area to identify accessible suspect asbestos-containing materials (ACMs) and lead-containing paints and coatings that will be disturbed during the planned project;
- Collection of bulk material samples for asbestos laboratory analysis by polarized light microscopy (PLM);
- Collection of bulk paint chip samples for lead laboratory analysis using atomic absorption spectrometry (AAS);
- Ensuring the technical quality of all work by using Asbestos Hazard Emergency Response Act (AHERA) accredited Building Inspectors;
- Ensuring the technical quality of all work by using California Department of Public Health (CDPH) Certified Lead Sampling Technicians and Inspector/Assessors; and
- Consolidating data and findings into a report format.

Site Characterization

The classrooms I-1 and I-2 were comprised of common construction materials such as wood framing and drywall, vinyl floor tiles, false ceiling tiles and sealants. Beige paint on wood sidings, and red paint on wood window frames and metal doors were present on the classrooms.

Survey Methods

Document Review

No previous documentation was reviewed prior to the inspection. The extent of the planned demolition project was provided by Tracy Unified School District.

Visual Inspection

Accessible building materials were visually inspected using the methods presented in the Federal AHERA regulations (40 CFR, Part 763). AHERA inspection methodology is required to be used for inspections of K-12 schools and is generally accepted as the industry standard for all ACM inspections regardless of structure or facility type. Suspect ACMs were also physically assessed for friability, condition and possible disturbance factors.

All areas were accessible during this inspection.

Asbestos Inspection

Bulk Sample Collection

Bulk samples of identified homogeneous materials were collected in building areas that may be impacted by the planned renovation/demolition activities. Samples were collected of each separate homogeneous area. A homogeneous area is defined as a surfacing material, thermal system insulation, or miscellaneous material that is uniform in use, color and texture. Examples of homogeneous areas could include:

- Vinyl floor tiles
- False ceiling panels
- Tackboard on Drywall
- Baseboard and Mastic

The specific number of samples collected was determined by using the methods required by the Federal AHERA regulations (40 CFR, Part 763.86) as noted below:

- 1) For Surfacing Material:
 - 1,000 ft² or less - collect 3 samples
 - 1,001 to 5,000 ft² - collect 5 samples
 - 5,001 ft² or greater - collect 7 samples
- 2) For Thermal System Insulation:
 - "In a randomly distributed manner" - collect 3 samples
 - 6 linear feet of patching or less - collect 1 sample
 - cementitious pipe fittings - "In a manner sufficient to determine"
- 3) For all Miscellaneous Material:
 - Collect samples "In a manner sufficient to determine whether material is ACM (asbestos-containing material) or not ACM..."

The suspect ACMs were sampled using a knife, chisel, scraper, drill or other similar coring device suitable to the type of material sampled to cut through its entire thickness and to ensure that a cross-section of the material was obtained. The material was then placed in an appropriately labeled container that was sealed and submitted to Eurofins Built Environment Testing for analysis. A unique sample number (e.g. PJ92843-01A) was assigned to each sample.

Bulk samples will be retained by the laboratory for one month unless otherwise instructed. After this period, the samples will be disposed of appropriately.

Bulk Sample Analysis

A total of twenty-three (23) bulk samples were collected from a total of ten (10) suspect materials. Bulk samples were analyzed by Eurofins Built Environment Testing West, LLC in Emeryville, California. Eurofins is accredited by the California Department of Public Health (CDPH) Environmental Laboratory Accreditation Program (ELAP) and the National Institute of Science and Technology's (NIST) National Voluntary Laboratory Accreditation Program (NVLAP). Eurofins participates in the National Institute for Occupational Safety and Health (NIOSH) Proficiency Analytical Testing Program and has substantial experience in the analysis of asbestos.

All samples were analyzed using Polarized Light Microscopy with Dispersion Staining (PLM/DS) techniques in accordance with the methodology approved by the U.S. Environmental Protection Agency (EPA). The percentage of asbestos present in the samples was determined on the basis of a visual area estimation. The EPA defines asbestos-containing materials (ACM) as any material containing more than one percent (1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy (PLM). 40 CFR Part 763 identifies the lower limit of reliable quantification for asbestos using the PLM method as approximately one percent (1%) by volume. Regulations in California (CAL/OSHA Title 8 CCR 1529) define asbestos-containing construction materials (ACCM) as those materials having asbestos content of greater than one tenth of one percent ($> 0.1\%$); therefore, for the purpose of this survey, any amount of asbestos detected will be considered positive. In addition to the percentages, the types of asbestos minerals are also reported. The PLM method is the standard method used to analyze asbestos bulk samples.

When "None Detected" (ND) appears in the laboratory results, it should be interpreted as meaning asbestos was not observed in the sample material.

Lead Inspection

The client-defined lead inspection was conducted in accordance with the CDPH Lead-Related Construction Program and modeled upon the sampling protocol described in "Chapter 7: Lead Based Paint Inspection" of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (1997 Revision).

Cal/OSHA, in Title 8 California Code of Regulations (CCR) Section 1532.1, Lead in Construction Standard which implements California Labor Code 8716-6717, regulates all construction work where an employee may be occupationally exposed to lead. Paint or materials with any detectable level of lead is considered lead-containing by Cal/OSHA.

Bulk Sampling Methodology

During this inspection, FACS personnel collected three bulk paint chip samples for laboratory confirmation of lead-content. Each sample was scraped from the substrate it had been applied to using a knife or chisel to obtain sufficient material for analysis. Each sample was given a unique marker number, identified on a chain-of-custody, packaged, and sent via FedEx to Eurofins in Emeryville, California for analysis. Eurofins is accredited by the American Industrial Hygiene Association's Environmental Lead Laboratory Accreditation Program for the analysis of lead in bulk paint chips by flame atomic absorption.

Regulations

Background

Asbestos is the name of a class of magnesium-silicate minerals that occur in fibrous form. Minerals that are included in this group are chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos. Although the chrysotile minerals are the most common type of asbestos found in the construction industry, all types of asbestos are regulated in the same manner. Asbestos has been

used in more than 3,000 different building materials. Asbestos was added to building materials to: increase fire-resistance, insulate against heat, cold and sound, resist corrosion, and increase tensile strength. Common building materials that may contain asbestos include but are not limited to the following: floor tile, resilient sheet flooring, ceiling tile, mastics, roofing materials, fireproofing, acoustical treatments, wallboard, pipe and boiler insulations. Adverse health effects have been associated with the inhalation of airborne asbestos. However, asbestos fibers that are tightly bound in the building material, may not represent an exposure hazard, unless disturbed in such a way that releases airborne fibers (i.e., cutting, drilling, sanding, and other abrasive methods).

Building Surveys

The following is a summary of some current Federal and California State regulations which contain requirements related to the performance of building surveys for asbestos. These summaries are not intended to be all inclusive and do not contain every aspect of the regulations discussed.

U.S. EPA National Emission Standard for Hazardous Air Pollutants (NESHAPs), 40 CFR Part 61

Under the NESHAPs regulation, no visible emissions are allowed during building demolition or renovation activities which involve regulated asbestos-containing materials. For this reason, all buildings must be surveyed for asbestos-containing materials prior to demolition or renovation. The EPA, CARB, and/or the local Air Quality Management District which implements EPA actions, must be notified prior to any building demolition even if no asbestos-containing materials are present. Regulated asbestos-containing material (RACM) is defined as a) any friable material with an asbestos content of greater than one percent, or b) any non-friable material with asbestos content of greater than one percent that will, or could, become friable.

Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763, Subpart E

AHERA requires performance of asbestos surveys and the development of Asbestos Management Plans for all primary and secondary schools in the United States. Although this regulation applies to primary and secondary schools only, the procedures mandated under AHERA are considered the industry standard and are applied to all surveys performed by FACS unless otherwise specified by the building owner.

Worker Protection

California Assembly Bill AB3713, Health and Safety Code Division 20, Chapter 10.4, Section 25915-25924

The state of California has enacted legislation that requires building owners, employers, lessees, etc. to notify tenants, employees and contractors of the presence of asbestos in both friable and non-friable forms. In addition, preventive maintenance activities must be developed and communicated to these parties. Notification is required 15 days after the identification of ACM in the building, and annually thereafter.

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 and 8 CCR 1529

The Federal and State Occupational Safety and Health Administrations (OSHA) require employers to implement specific work practices which protect workers from airborne asbestos exposure.

Building materials which contain even low levels of asbestos (<1%) can potentially generate significant concentrations of airborne asbestos fibers when disturbed. Therefore, control measures should be instituted which adequately address worker health and safety during planned renovation or demolition

activities involving these materials. Cal/OSHA defines asbestos-containing construction materials as those materials having greater than one tenth of one percent asbestos (>0.1%). As stated previously, there is currently no viable method to accurately quantify asbestos at this level.

Hazardous Waste

Building materials reported to contain less than one percent (<1%) of asbestos are not considered hazardous by the U.S. EPA, and hence, may not require removal and disposal prior to demolition or renovation. Regulations may vary, however, between regional air quality management districts and/or other state agencies responsible for implementing EPA's rules. Therefore, local agencies should be contacted for specific ACM definitions and handling requirements. Cal/OSHA may also require special packaging and labeling on containers with asbestos-containing construction materials.

Composite sampling, which may potentially reduce the total asbestos content of the material, is only permitted when sampling joint compound, tape, and gypsum wallboard according to EPA's Asbestos NESHAP Clarification Regarding Analysis of Multi-Layered Systems (40 CFR Part 61 FRL-4821-7).

Lead

Cal/OSHA Lead (8 CCR 1532.1) & CDPH (Title 17)

If paints or coatings containing any detectable concentration of lead will be impacted, a project should be considered regulated by Cal/OSHA as lead-related construction (8 CCR 1532.1).

A contractor who has employees that may be occupationally exposed to lead during a project must perform an initial determination regarding worker exposures to lead, which may be based on personal air monitoring at the start of the project, prior employee monitoring from the past 12 months under workplace conditions closely resembling the current project, or using regulatory trigger tasks and their assigned exposure limits. It is the contractor's responsibility to conduct their initial determination and comply with any relevant Cal/OSHA requirements based on this determination in regard to training, medical monitoring of employees, personal protection equipment and other regulatory requirements.

Workers disturbing existing paints or coatings during a project must have lead awareness or action level training, depending on the initial exposure determination. Workers that will disturb paints with detectable concentrations of lead must use lead-safe engineering controls and work practices regardless of results of any exposure monitoring data. Disturbance of lead-containing paints or coatings must be performed within a contained area to prevent the spread and build-up of lead dust in order to comply with CDPH and keep surfaces as free as practical of accumulation of lead to meet Cal/OSHA requirements. HEPA vacuums, dustless tools or shrouds, and/or intact removal of components should be employed to minimize lead dust generation and properly cleanup work areas following disturbance to lead-containing materials during a project. Waste generated during disturbance to lead-containing materials must be profiled in a hazardous waste determination to ascertain proper disposal requirements.

If the initial determination or initial exposure monitoring shows that workers impacting lead can be expected to be, or are shown to be, exposed to lead above 50 micrograms per cubic meter of air, workers and supervisors must have the requisite training and CDPH lead worker or supervisor certification.

The Cal/OSHA regulation was recently revised and additional requirements must be met by employers with employees that disturb lead paint. Any contractor / employer that may require workers to disturb lead-containing paints found with the project area should ensure that they are familiar and in compliance with the new revisions to the regulation.

Findings and Recommendations

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Tracy Unified School district to perform an asbestos and lead paint survey in rooms I1 and I2 of Kimball High School, located at 3200 Jaguar Run in Tracy, California.

The following suspect materials were sampled during this survey and identified to **not contain** asbestos by laboratory analysis:

- **12" Vinyl Floor Tile and Mastic – Beige Oatmeal**
- **4" Baseboard and Mastic – Brown**
- **Tackboard on Drywall**
- **2'x4' False Ceiling Panel - Fiberglass**
- **Foil Tape**
- **4" Baseboard and Mastic – Beige**
- **2'x4' False Ceiling Panel – Pinhole Fissure**
- **Siding Sealant**
- **Base Sealant**
- **Bolt Mastic**

Please see Appendix A for a complete listing of materials sampled from the work areas and results from this survey. Any suspect materials not included must be assumed to be asbestos-containing materials until tested and proven not to contain asbestos.

Lead

The following paints/coatings did **not contain** detectable concentrations of lead above the laboratory's reporting limit:

- **Beige Paint on Wood Siding**
- **Red Paint on Wood Window Frame**
- **Red Paint on Metal Door Frame**

FACS recommends that the results of this report be incorporated into any demolition plans provided for this project for informational purposes.

Limitations

This investigation is limited to the conditions and practices observed, and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise, and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

Please do not hesitate to contact our office at 209-551-2000 with any questions or concerns. Thank you for the opportunity to assist Tracy Unified School District with promoting worker safety and a healthy environment.

Respectfully,

Reviewed by:

FORENSIC ANALYTICAL



Karliann Atwell
EHS, Modesto
Cal/OSHA CSST #25-8021
CDPH LRC-00014854

FORENSIC ANALYTICAL



Tyler Faison
Assistant Director, Central Valley
Cal/OSHA CAC #22-6824
CDPH LRC-00002454

Appendix A

Asbestos Survey Summary, Sample Chain-of-Custody and Laboratory Results Report

Asbestos Survey Summary (Lab Report #4603451) Tracy Unified School District – Kimball High School – I1 & I2 Demolition Survey Survey Date: June 30, 2026						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (%)	Asbestos NESHAP Category	Approximate Quantity
01A, 01B	12" VFT and Mastic – Beige Oatmeal	Room I1	01	Layer: Beige Floor Tile: None Detect Layer: Yellow Mastic: None Detect	NA	NA
02A, 02B	4" Baseboard and Mastic – Brown	Room I1	02	Layer: Yellow Mastic: None Detect Layer: Brown Baseboard: None Detect	NA	NA
03A-03E	Tackboard over Drywall	Room I1 and Room I2	03	Layer: White Paint: None Detect Layer: Yellow Fibrous Material – Tackboard: None Detect Layer: White Drywall with Brown Paper: None Detect	NA	NA
04A, 04B	2'x4" FCP - Fiberglass	Room I1	04	Layer: Yellow Fibrous Material: Fiberglass: None Detect Layer: White Paint: None Detect	NA	NA
05A, 05B	Foil Tape	Room I1	05	Layer: Silver Foil: None Detect Layer: Brown/Green Adhesive: None Detect	NA	NA
06A, 06B	4" Baseboard and Mastic – Beige	Room I2	06	Layer: Yellow Fibrous Material with Paint: None Detect Layer: Beige Baseboard: None Detect Layer: Tan Mastic: None Detect	NA	NA
07A, 07B	2'x4' FCP – Pinhole Fissure	Room I2	07	Layer: Grey Fibrous Material – Pinhole Fissure: None Detect Layer: White Paint: None Detect	NA	NA

Asbestos Survey Summary (Lab Report #4603451) Tracy Unified School District – Kimball High School – I1 & I2 Demolition Survey Survey Date: June 30, 2026						
Sample Number	Material Description	Location(s) of Material	Material Number	Asbestos Content (%)	Asbestos NESHAP Category	Approximate Quantity
08A, 08B	Siding Sealant	Exterior	08	Layer: Semi-Transparent Sealant with Paint: None Detect	NA	NA
09A, 09B	Base Sealant	Exterior	09	Layer: Grey Sealant: None Detect	NA	NA
10A, 10B	Bolt Mastic	Exterior	10	Layer: Grey Mastic: None Detect	NA	NA

Report for:

Chris Chipponeri, Trevor Leitz
Forensic Analytical Consulting Services- Modesto
313 Banner Court, Suite B
Modesto, CA 95356

Regarding: Eurofins Built Environment Testing West, LLC
Project: PJ92843; Tracy Unified School District-Kimball HS Rms I-1 & 2 Demolition HBM Survey
EML ID: 4603451

Approved by:

Dates of Analysis:
Asbestos PLM: 07-09-2026



Signatory
David Andrews

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA 600/R-93-116, EBET-PLM-SOP83921)
NVLAP Lab Code 101872-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins Built Environment Testing West, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026

Date of Receipt: 07-01-2026

Date of Report: 07-09-2026

ASBESTOS PLM REPORT

Total Samples Submitted: 23

Total Samples Analyzed: 23

Total Samples with Layer Asbestos Content > 1%: 0

Location: PJ92843-01A

Lab ID-Version#: 23216845-1

Sample Layers	Asbestos Content
Beige Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-01B

Lab ID-Version#: 23216846-1

Sample Layers	Asbestos Content
Beige Floor Tile	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-02A

Lab ID-Version#: 23216847-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Brown Baseboard	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-02B

Lab ID-Version#: 23216848-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Brown Baseboard	ND
Sample Composite Homogeneity:	Moderate

"Trace" indicates asbestos fibers were observed at levels below the PLM visual estimation quantification limit and are therefore interpreted as <1% by area. Per guidance from the Environmental Protection Agency and the National Voluntary Laboratory Accreditation Program, "trace" is not a definitive quantification. Such materials should be treated as ACM unless point count analysis confirms the concentration is <1%.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026
Date of Receipt: 07-01-2026
Date of Report: 07-09-2026

ASBESTOS PLM REPORT

Location: PJ92843-03A

Lab ID-Version#: 23216849-1

Sample Layers	Asbestos Content
White Paint	ND
Yellow Fibrous Material - Tackboard	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	40% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-03B

Lab ID-Version#: 23216850-1

Sample Layers	Asbestos Content
White Paint	ND
Yellow Fibrous Material - Tackboard	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	40% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-03C

Lab ID-Version#: 23216851-1

Sample Layers	Asbestos Content
White Paint	ND
Yellow Fibrous Material - Tackboard	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	40% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-03D

Lab ID-Version#: 23216852-1

Sample Layers	Asbestos Content
White Paint	ND
Yellow Fibrous Material - Tackboard	ND
Composite Non-Asbestos Content:	40% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Described Drywall not observed in submitted sample.

"Trace" indicates asbestos fibers were observed at levels below the PLM visual estimation quantification limit and are therefore interpreted as <1% by area. Per guidance from the Environmental Protection Agency and the National Voluntary Laboratory Accreditation Program, "trace" is not a definitive quantification. Such materials should be treated as ACM unless point count analysis confirms the concentration is <1%.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026
Date of Receipt: 07-01-2026
Date of Report: 07-09-2026

ASBESTOS PLM REPORT

Location: PJ92843-03E

Lab ID-Version#: 23216853-1

Sample Layers	Asbestos Content
White Paint	ND
Yellow Fibrous Material - Tackboard	ND
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	40% Cellulose 2% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-04A

Lab ID-Version#: 23216854-1

Sample Layers	Asbestos Content
Yellow Fibrous Material - Fiberglass	ND
White Paint	ND
Composite Non-Asbestos Content:	80% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-04B

Lab ID-Version#: 23216855-1

Sample Layers	Asbestos Content
Yellow Fibrous Material - Fiberglass	ND
White Paint	ND
Composite Non-Asbestos Content:	80% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-05A

Lab ID-Version#: 23216856-1

Sample Layers	Asbestos Content
Silver Foil	ND
Brown/Green Adhesive	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-05B

Lab ID-Version#: 23216857-1

Sample Layers	Asbestos Content
Silver Foil	ND
Brown/Green Adhesive	ND
Sample Composite Homogeneity:	Moderate

"Trace" indicates asbestos fibers were observed at levels below the PLM visual estimation quantification limit and are therefore interpreted as <1% by area. Per guidance from the Environmental Protection Agency and the National Voluntary Laboratory Accreditation Program, "trace" is not a definitive quantification. Such materials should be treated as ACM unless point count analysis confirms the concentration is <1%.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026
Date of Receipt: 07-01-2026
Date of Report: 07-09-2026

ASBESTOS PLM REPORT

Location: PJ92843-06A

Lab ID-Version#: 23216858-1

Sample Layers	Asbestos Content
Yellow Fibrous Material with Paint	ND
Beige Baseboard	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Moderate

Location: PJ92843-06B

Lab ID-Version#: 23216859-1

Sample Layers	Asbestos Content
Beige Baseboard	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Moderate

Location: PJ92843-07A

Lab ID-Version#: 23216860-1

Sample Layers	Asbestos Content
Gray Fibrous Material - Pinhole Fissure	ND
White Paint	ND
Composite Non-Asbestos Content:	20% Cellulose 15% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-07B

Lab ID-Version#: 23216861-1

Sample Layers	Asbestos Content
Gray Fibrous Material - Pinhole Fissure	ND
White Paint	ND
Composite Non-Asbestos Content:	20% Cellulose 15% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: PJ92843-08A

Lab ID-Version#: 23216862-1

Sample Layers	Asbestos Content
Semi-Transparent Sealant with Paint	ND
Sample Composite Homogeneity:	Moderate

"Trace" indicates asbestos fibers were observed at levels below the PLM visual estimation quantification limit and are therefore interpreted as <1% by area. Per guidance from the Environmental Protection Agency and the National Voluntary Laboratory Accreditation Program, "trace" is not a definitive quantification. Such materials should be treated as ACM unless point count analysis confirms the concentration is <1%.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026

Date of Receipt: 07-01-2026

Date of Report: 07-09-2026

ASBESTOS PLM REPORT

Location: PJ92843-08B

Lab ID-Version#: 23216863-1

Sample Layers	Asbestos Content
Semi-Transparent Sealant with Paint	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-09A

Lab ID-Version#: 23216864-1

Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-09B

Lab ID-Version#: 23216865-1

Sample Layers	Asbestos Content
Gray Sealant	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-10A

Lab ID-Version#: 23216866-1

Sample Layers	Asbestos Content
Gray Mastic	ND
Sample Composite Homogeneity:	Moderate

Location: PJ92843-10B

Lab ID-Version#: 23216867-1

Sample Layers	Asbestos Content
Gray Mastic	ND
Sample Composite Homogeneity:	Moderate

"Trace" indicates asbestos fibers were observed at levels below the PLM visual estimation quantification limit and are therefore interpreted as <1% by area. Per guidance from the Environmental Protection Agency and the National Voluntary Laboratory Accreditation Program, "trace" is not a definitive quantification. Such materials should be treated as ACM unless point count analysis confirms the concentration is <1%.

Client: Forensic Analytical Consulting Services-
Modesto
C/O: Chris Chipponeri, Trevor Leitz
Re: PJ92843; Tracy Unified School District-Kimball
HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC
5900 Hollis Street, Suite M, Emeryville, CA 94608
(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026

Date of Receipt: 07-01-2026

Date of Report: 07-09-2026

ASBESTOS PLM REPORT

PROJECT ANALYST AND SIGNATORY REPORT

Project Analyst



Analyst: Cesar Ruiz Castillo

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

All components not quantified as asbestos content and non-asbestos content are considered to be non-fibrous matrix components. Matrix components may include, but are not limited to, gypsum, paint, silicate minerals, vinyl, binder, calcium carbonate, tar, and foam.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed.

Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



BULK SAMPLE REQUEST FORM

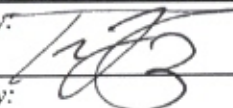
Client: FACS Modesto	Sampled by: Trevor Leitz PM: Chris Chipponeri Date: 6-30-26										
Contact: Chris Chipponeri Phone: (209) 484-4648	Special Instructions: Please email results to Chris.C@facs.com & Trevor.L@facs.com										
Site: Tracy USD – Kimball HS – Rooms I1 & I2	Turnaround Time: <table border="1"> <tr> <td>1-Day</td> <td>2-Day</td> <td>3-Day</td> <td>5-Day</td> <td>Other</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> </table> Due Date and Time:	1-Day	2-Day	3-Day	5-Day	Other	☐	☐	☐	☒	☐
1-Day	2-Day	3-Day	5-Day	Other							
☐	☐	☐	☒	☐							
Client No.: MOD08 FACS Job #: PJ92843	Analysis: <table border="1"> <tr> <td>☒ PLM Standard</td> <td>☐ Point Count</td> <td>☐ Flame AA (Pb)</td> </tr> <tr> <td>☐ Other:</td> <td></td> <td></td> </tr> </table>	☒ PLM Standard	☐ Point Count	☐ Flame AA (Pb)	☐ Other:						
☒ PLM Standard	☐ Point Count	☐ Flame AA (Pb)									
☐ Other:											

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
PJ92843 – 01A	12" VFT & Mastic – Beige Oatmeal	Room I1 – SW Corner			
PJ92843 – 01B	12" VFT & Mastic – Beige Oatmeal	Room I2 – Center at Damage			
PJ92843 – 02A	4" Baseboard & Mastic – Brown	Room I1 – NE Corner			
PJ92843 – 02B	4" Baseboard & Mastic – Brown	Room I1 – SW Corner			
PJ92843 – 03A	Tackboard over Drywall	Room I1 – SW Corner			
PJ92843 – 03B	Tackboard over Drywall	Room I1 – NW Corner			
PJ92843 – 03C	Tackboard over Drywall	Room I1 – SE Corner			
PJ92843 – 03D	Tackboard over Drywall	Room I2 – SW Corner			
PJ92843 – 03E	Tackboard over Drywall	Room I2 – South Center			
PJ92843 – 04A	2x4 FCP – Fiberglass	Room I1 – North Center			

WB – Wallboard JC – Joint Compound FT – Floor Tile FTM – Floor Tile Mastic BBM – Baseboard Mastic
 RSF – Resilient Sheet Flooring CT – Ceiling Tile SAAM – Spray-Applied Acoustical Material WT – Wall Texture

Friable Good /
 Yes / No Fair / Poor

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by: 	Date & Time: 6-30-26	Received by: 	Date & Time: 7/1/26 1013
Relinquished by: 	Date & Time:	Received by:	Date & Time:
			Condition Acceptable ☐ Yes ☐ No
			Condition Acceptable ☐ Yes ☐ No



BULK SAMPLE REQUEST FORM

Client: FACS Modesto	Sampled by: Trevor Leitz PM: Chris Chipponeri Date: 6-30-26
Contact: Chris Chipponeri Phone: (209) 484-4648	Special Instructions: Please email results to Chris.C@facs.com & Trevor.L@facs.com
Site: Tracy USD – Kimball HS – Rooms I1 & I2	Turnaround Time: ☐ 1-Day ☐ 2-Day ☐ 3-Day ☒ 5-Day ☐ Other Due Date and Time:
Client No.: MOD08 FACS Job #: PJ92843	Analysis: ☒ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
PJ92843 – 04B	2x4 FCP – Fiberglass	Room I1 – West Center			
PJ92843 – 05A	Foil Tape	Room I1 – SW Side			
PJ92843 – 05B	Foil Tape	Room I1 – SW Side			
PJ92843 – 06A	4" Baseboard & Mastic – Beige	Room I2 – SE Corner			
PJ92843 – 06B	4" Baseboard & Mastic – Beige	Room I2 – NE Corner			
PJ92843 – 07A	2x4 FCP – Pinhole Fissure	Room I2 – West Center			
PJ92843 – 07B	2x4 FCP – Pinhole Fissure	Room I2 – East Center			
PJ92843 – 08A	Siding Sealant	Exterior – SW Side			
PJ92843 – 08B	Siding Sealant	Exterior – West Side North End			
PJ92843 – 09A	Sealant at Base	Exterior – SW Side			



004603451

WB – Wallboard JC – Joint Compound FT – Floor Tile FTM – Floor Tile Mastic BBM – Baseboard Mastic
 RSF – Resilient Sheet Flooring CT – Ceiling Tile SAAM – Spray-Applied Acoustical Material WT – Wall Texture

Friable Good /
 Yes / No Fair / Poor

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	Date & Time: 6-30-26	Received by:	Date & Time: 7/1/26 10:3
Relinquished by:	Date & Time:	Received by:	Date & Time:
			Condition Acceptable ☐ Yes ☐ No
			Condition Acceptable ☐ Yes ☐ No



BULK SAMPLE REQUEST FORM

Client: FACS Modesto		Sampled by: Trevor Leitz		PM: Chris Chipponeri		Date: 6-30-26	
Contact: Chris Chipponeri		Phone: (209) 484-4648		Special Instructions: Please email results to Chris.C@facs.com & Trevor.L@facs.com			
Site: Tracy USD – Kimball HS – Rooms I1 & I2		Turnaround Time:	1-Day ☐	2-Day ☐	3-Day ☐	5-Day ☒	Other ☐
Client No.: MOD08		FACS Job #: PJ92843		Analysis: ☒ PLM Standard / ☐ Point Count / ☐ Flame AA (Pb) / ☐ Other:			

Sample Number	Material Description	Sample Location	Friable	Cond.	Quantity
PJ92843 – 09B	Sealant at Base	Exterior – SE Side			
PJ92843 – 10A	Bolt Mastic	Exterior – West Center			
PJ92843 – 10B	Bolt Mastic	Exterior – West Center			



004603451

WB – Wallboard JC - Joint Compound FT - Floor Tile FTM - Floor Tile Mastic BBM - Baseboard Mastic
RSF - Resilient Sheet Flooring CT - Ceiling Tile SAAM - Spray-Applied Acoustical Material WT - Wall Texture

Friable Good /
Yes / No Fair / Poor

Shipped via: ☒ Fed Ex ☐ Airborne ☐ UPS ☐ US Mail ☐ Courier ☐ Drop Off ☐ Other:

Relinquished by:	Date & Time: 6-30-26	Received by:	Date & Time: 7/1/20 1013
Relinquished by:	Date & Time:	Received by:	Date & Time:
Condition Acceptable ☐ Yes ☐ No		Condition Acceptable ☐ Yes ☐ No	

Appendix B

Lead Paint Chip Summary, Sample Chain-of-Custody, Laboratory Results Report, and CDPH 8552 Form

Lead Paint Chip Summary (Lab Report #4603461) Tracy Unified School District – Kimball High School – I1 & I2 Demolition Survey Survey Date: June 30, 2026					
Sample Number	Component Location	Component	Color	Substrate	Analytical Results (parts per million)
Pb01	I1 and I2 Exterior	Siding	Beige	Wood	<45
Pb02	I1 and I2 Exterior	Window Frame	Red	Wood	<48
Pb03	I1 and I2 Exterior	Door Frame	Red	Metal	<45

Report for:

Chris Chipponeri, Trevor Leitz
Forensic Analytical Consulting Services- Modesto
313 Banner Court, Suite B
Modesto, CA 95356

Regarding: Eurofins Built Environment Testing West, LLC
Project: PJ92843; Tracy Unified School District-Kimball HS Rms I-1 & 2 Demolition HBM Survey
EML ID: 4603461

Approved by:



Dates of Analysis:

Lead - Flame AA: 07-01-2026

Signatory
Ren Newman

Service SOPs: Lead - Flame AA (EBET-MET-SOP84135 (formerly EB-BC-S-8443))
AIHA LAP, LLC accredited service, Lab ID #101768

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Sample size, as it relates to Wipe samples only, is supplied by the client.

Eurofins Built Environment Testing West, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins Built Environment Testing West, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Client: Forensic Analytical Consulting Services-
Modesto

C/O: Chris Chipponeri, Trevor Leitz

Re: PJ92843; Tracy Unified School District-Kimball

HS Rms I-1 & 2 Demolition HBM Survey

Eurofins Built Environment Testing West, LLC

5900 Hollis Street, Suite M, Emeryville, CA 94608

(833) 465-5857 www.eurofinsus.com/Built

Date of Sampling: 06-30-2026

Date of Receipt: 07-01-2026

Date of Report: 07-02-2026

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	PJ92843-Pb01	PJ92843-Pb02	PJ92843-Pb03
Comments (see below)	None	None	None
Lab ID-Version‡:	23216897-1	23216898-1	23216899-1
Analysis Date:	07/01/2026	07/01/2026	07/01/2026
Sample type	Paint Chip sample	Paint Chip sample	Paint Chip sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	45 ppm	48 ppm	45 ppm
Sample size	0.2230 grams	0.2090 grams	0.2240 grams
§ Total Lead Result	< 45 ppm	< 48 ppm	< 45 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

Estimated accuracy is solely based on recovery data from internal laboratory control samples at the 95% confidence interval ($k \sim 2$) of the level of concern, derived from a 1,000-ppm certified lead reference.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Appendix C

Site Photos and Sample Location Drawings



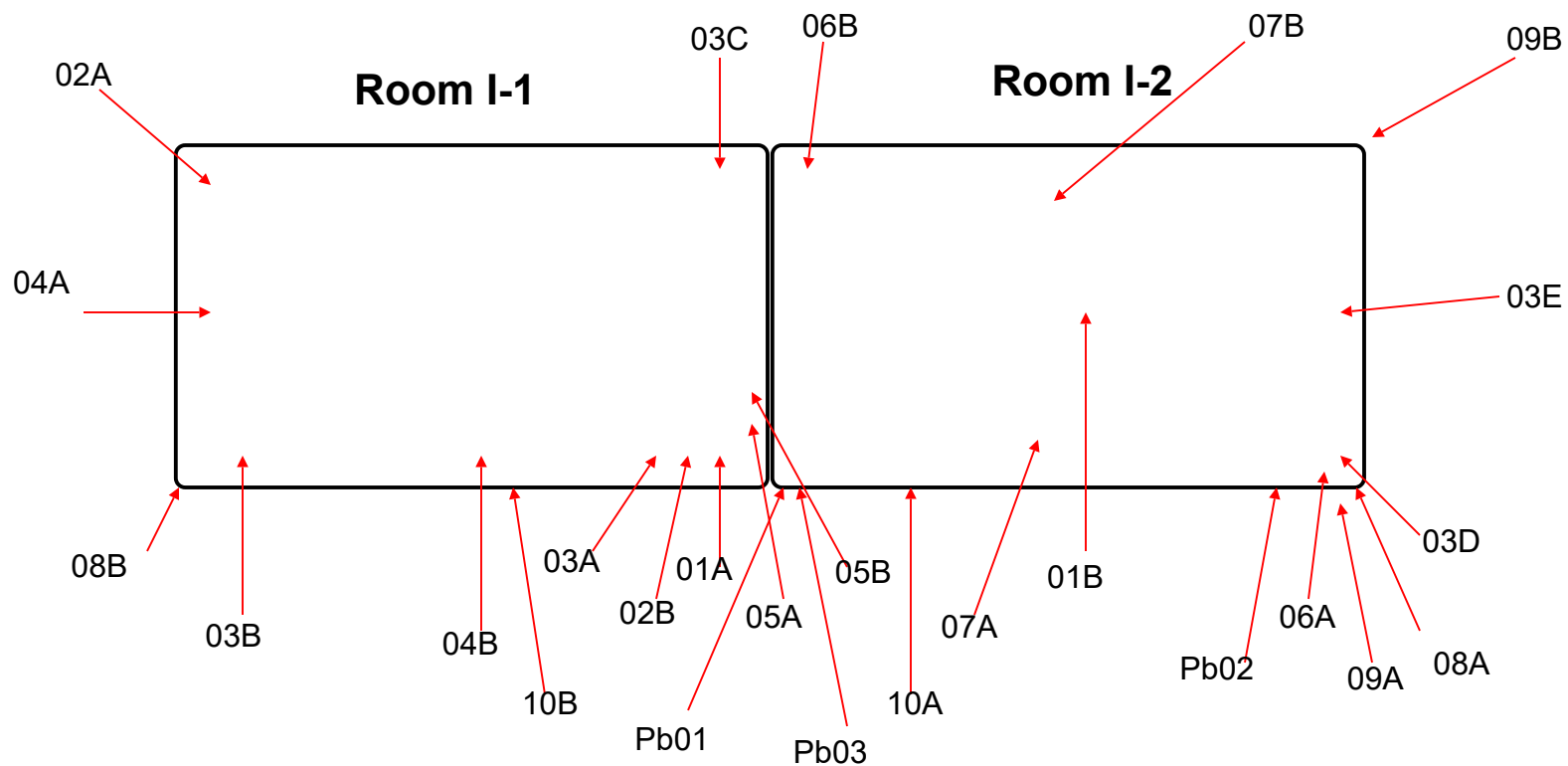
Photo #1 Black Baseboard



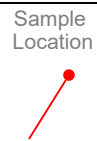
Photo #2 Beige Paint on Wood Siding



Photo #3 Vinyl Flooring



FACS 35
 Forensic Analytical Consulting Services
 CELEBRATING 35 YEARS OF EXCELLENCE - 1986-2021
 313 Banner Court, Suite B
 Modesto, CA 95356



Kimball High School
 3200 Jaguar Run
 Tracy, CA 95377

Rooms I-1 & I-2 Demo Survey

LOCATION:
 3200 Jaguar Run
 Tracy, CA 95377

DRAWN BY:
 Eric Stockel

FACS PROJECT No.:
 PJ92843

This is a design drawing and is the property of Forensic Analytical Consulting Services, Inc. It is not intended to replace required architectural or engineering plans.

Appendix D

Certifications of Personnel and Laboratories

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS

Division of Occupational Safety and Health-Asbestos & Carcinogen Unit

1750 Howe Avenue, Suite 460

Sacramento, CA 95825

(916) 574-2993 Office

<http://www.dir.ca.gov/dosh/asbestos.html> actu@dir.ca.gov

Gavin Newsom, Governor



910116682T

12/24/2025

Forensic Analytical Consulting Services
Trevor Leitz
313 Banner Court, Suite B
Modesto CA 95356

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/mailling information within 15 days of the change.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dean'.

Dean Mochrie, CAC
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (08/24)

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician
Trevor T Leitz



Name

Certification No. **19-6682**

Expires on **12/18/2026**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq of the Business and Professions Code.



Forensic Analytical Consulting Services, Inc.

This is to confirm that
Trevor Leitz

Has attended the Four hour

AHERA Refresher Course for Asbestos Inspectors

And has completed the requisite training for asbestos accreditation under TSCA Title II

Course Date: 08-28-2025 to 08-28-2025

Certificate Number: PETBIR2025181

Valid Until: August 28, 2026

Cal/OSHA Approval Number: CA-025-06



Fred J. Vinciguerra, Chief Executive Officer
Forensic Analytical Consulting Services, Inc.
21228 Cabot Blvd, Hayward, CA 94545
(800) 677-1483

Forensic Analytical Consulting Services, Inc.

This is to confirm that

Eric Stockel

Has attended the twenty four hour

AHERA Initial Course for Asbestos Inspectors

And has completed the requisite training and passed the exam for asbestos accreditation under TSCA Title II

Course Date: 10/06/2025 - 10/08/2025

Certificate Number: PETBII2025019

Valid Until: October 8, 2026

Cal/OSHA Approval Number: CA-025-05



Fred J. Vinciguerra, Chief Executive Officer
Forensic Analytical Consulting Services, Inc.
21228 Cabot Blvd, Hayward, CA 94545
(800) 677-1483

STATE OF CALIFORNIA

DEPARTMENT OF INDUSTRIAL RELATIONS

Division of Occupational Safety and Health-Asbestos & Carcinogen Unit

1750 Howe Avenue, Suite 460

Sacramento, CA 95825

(916) 574-2993 Office

<http://www.dir.ca.gov/dosh/asbestos.html> actu@dir.ca.gov

Gavin Newsom, Governor



008186824C

1/20/2026

Tyler Faison
3417 Switzer Avenue
Modesto CA 95350

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please contact our office at the above address or email w any changes in your contact/ mailing information within 15 days of the change.

Sincerely,

Dean Mochrie, CAC
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (08/24)

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant
Tyler Faison

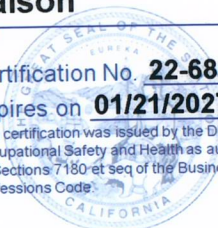


Name

Certification No. **22-6824**

Expires on **01/21/2027**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq of the Business and Professions Code.



Forensic Analytical Consulting Services, Inc.

This is to confirm that
Tyler Faison

Has attended the Four hour

AHERA Refresher Course for Asbestos Inspectors

And has completed the requisite training for asbestos accreditation under TSCA Title II

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Kimball High School Two-Story Classroom Building

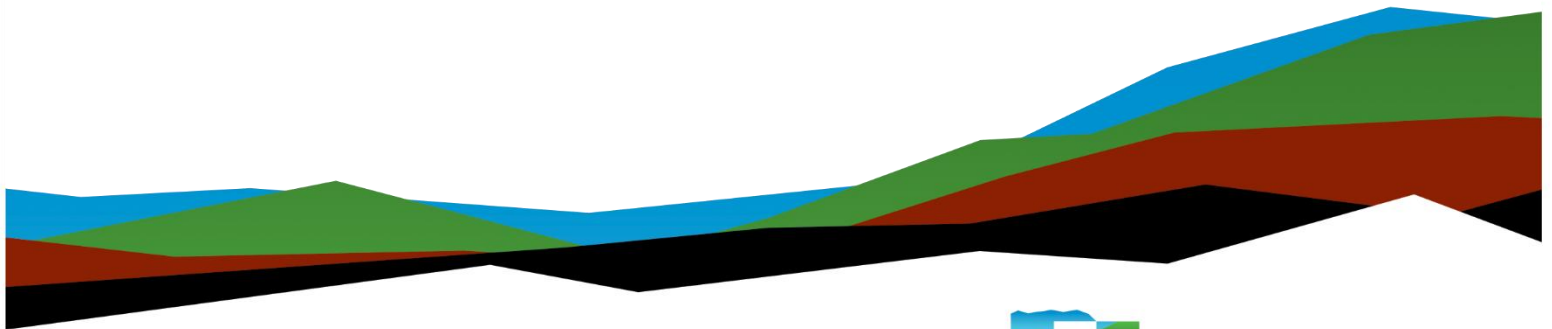
Geotechnical Engineering and Geologic Hazard Report

Tracy, San Joaquin County, California

Revised June 19, 2026 | Terracon Project No. NA255078

Prepared for:

Tracy Unified School District
1875 W Lowell Avenue
Tracy, CA 95376



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Revised June 19, 2026

Tracy Unified School District
1875 W Lowell Avenue
Tracy, CA 95376

Attn: Eloy Vento
P: (209) 830-3200
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Re: Geotechnical Engineering and Geologic Hazard Report
Kimball High School Two-Story Classroom Building
3200 Jaguar Run
Tracy, San Joaquin County, California
Terracon Project No. NA255078

Dear Mr. Vento:

We have completed the scope of Geotechnical Engineering and Geologic Hazard services for the referenced project in general accordance with Terracon Proposal No. PNA255078 dated September 5, 2025. This revised report presents the findings of the subsurface exploration and provides a geologic hazard evaluation of the site and presents geotechnical recommendations concerning earthwork and the design and construction of foundations and floor slabs for the proposed project. The revisions are to update seismic parameters to ASCE 7-22/CBC 2025.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon



Christopher B. Congrave, PE 92512
Senior Engineer

Anthony Argyriou, GE 2687
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Table of Contents

Report Summary	3
Introduction.....	4
Project Description.....	4
Site Conditions	5
Geotechnical Characterization	6
Groundwater Conditions.....	6
Geologic Setting	8
Geologic Hazards.....	9
Faulting and Seismicity	9
Liquefaction	11
Inundation by Tsunamis and Seiches	11
Flooding	11
Landslides, Lateral Spreading, and Debris Flow	12
Expansive Soils	12
Subsidence Potential	13
Erosion Potential.....	13
Volcanic Hazards	13
Radon	14
Naturally Occurring Asbestos (NOA).....	14
Oil and Gas Exploration	15
Seismic Considerations.....	15
Liquefaction Evaluation	17
Corrosivity	17
Geotechnical Overview	18
Soft/Unstable Subgrade	18
Expansive Soils	19
Earthwork	20
Demolition	20
Site Preparation.....	20
Subgrade Preparation	21
Excavation.....	22
Soil Stabilization.....	22
Fill Material Types	24
Fill Placement and Compaction Requirements	25
Utility Trench Backfill	26
Grading and Drainage.....	27
Earthwork Construction Considerations	28
Construction Observation and Testing	29
Shallow Foundations	30
Design Parameters – Compressive Loads	30
Foundation Construction Considerations	31

Floor Slabs	32
Floor Slab Design Parameters	33
Floor Slab Construction Considerations	34
Exterior Hardscape.....	35
General Comments	35
References	37

Figures

GeoModel

Attachments

Exploration and Testing Procedures

Site Location and Exploration Plans

Exploration and Laboratory Results

Supporting Information

Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the  Terracon logo will bring you back to this page. For more interactive features, please view your project online at client.terracon.com.

Refer to each individual Attachment for a listing of contents.

Report Summary

Topic ¹	Overview Statement ²
Project Description	The project includes a two-story modular classroom building with surrounding flatwork and landscaping.
Geotechnical Characterization	Subsurface soil encountered in our soil borings and Cone Penetration Test sounding (CPT) generally consisted of interbedded layers of medium stiff to very stiff lean clay and loose to medium dense sand with various amounts of clay and gravel to the maximum depth explored of 51½ feet below the existing ground surface (bgs) in our borings, and 85½ feet bgs in our CPT. Groundwater measured in our CPT and boring B1 at a depth of approximately 24½ feet bgs at the time the CPT and borings were advanced. Regionally, a nearby groundwater monitoring well recorded a historically high groundwater level of approximately 19 feet based on data obtained from the California Department of Water Resources water data library.
Earthwork	Preliminary grading plans were not available for review at the time this report was prepared. We have assumed site grades will generally remain the same as existing at the time this report was prepared. Cuts and fills on the order of 2 feet or less are anticipated to be required to develop final grades. Near surface on-site soils are expansive and <u>may not</u> be reused as structural fill unless chemically stabilized with high calcium quicklime. Grading should be conducted in accordance with the Earthwork section of this report.
Shallow Foundations	Shallow foundations are recommended for building support. Allowable bearing pressure = 2,000 psf Expected settlements: < 1-inch total, < ½-inch differential
General Comments	This section contains important information about the limitations of this geotechnical engineering report.

1. If the reader is reviewing this report as a pdf, the topics in the table can be used to access the appropriate section of the report by simply clicking on the topic itself.
2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.



Introduction

This report presents the results of our subsurface exploration and Geotechnical Engineering and Geologic Hazard services performed for the proposed two-story classroom building to be located at 3200 Jaguar Run in Tracy, San Joaquin County, California. The purpose of these services was to evaluate the risk of geologic hazards impacting the site and provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Seismic site classification per the 2025 California Building Code (CBC)
- Site preparation and earthwork
- Foundation design and construction
- Floor slab design and construction
- Liquefaction potential
- Corrosivity results

The geotechnical engineering Scope of Services for this project included the advancement of test borings, laboratory testing, engineering analysis, and preparation of this report.

Drawings showing the site and boring locations are shown on the [Site Location](#) and [Exploration Plan](#), respectively. The results of the laboratory testing performed on soil samples obtained from the site during our field exploration are included on the boring logs and/or as separate graphs in the [Exploration and Laboratory Results](#) section.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	An email request for proposal was provided by Melissa Szpik of StudioW Architects on April 30, 2025. The request included a conceptual design of the planned development, dated March 3, 2025.
Project Description	The project includes a two-story modular classroom building with surrounding flatwork and landscaping.

Item	Description
Proposed Structure	The structure associated with the project includes an approximately 7,000 square foot two-story classroom building.
Building Construction	We anticipate construction will consist of steel framing with fiber cement or cement plaster siding.
Finished Floor Elevation	We have assumed the planned finished floor elevation of the proposed building is not more than 2 feet below/above existing grade.
Maximum Loads	Anticipated structural loads were not provided. In the absence of information provided by the design team, we used the following loads in estimating settlement based on our experience with similar projects. ■ Columns: 80 kips ■ Walls: 4 kips per linear foot (klf) ■ Slabs: 150 pounds per square foot (psf)
Grading	We have assumed less than 2 feet of cut or fill will be required to develop final grades, excluding remedial grading requirements.
Building Code	2025 CBC

Terracon should be notified if any of this information is inconsistent with the planned construction, especially the grading limits, as modifications to our recommendations may be necessary.

Site Conditions

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project is located at 3200 Jaguar Run in Tracy, San Joaquin County, California. Assessor Parcel Number (APN): 240-04-004 Latitude/Longitude (approximate): 37.7321°N, 121.4729°W See Site Location
Existing Improvements	The site is an existing high school with classrooms and other supporting buildings.

Item	Description
Current Ground Cover	The current ground cover consists of a manicured lawn.
Existing Topography	The property is relatively flat based on a review of Google Earth and observations made during our field exploration.

Geotechnical Characterization

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting, and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of the site. Conditions observed at each exploration point are indicated on the individual logs. The individual logs can be found in [Exploration and Laboratory Results](#) and the GeoModel can be found in the [Figures](#) attachment of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Lean Clay	Medium stiff to very stiff lean clay with varying amounts of sand
2	Clayey Sand	Medium dense clayey sand
3	Poorly Graded Sand	Loose to medium dense poorly graded sand with varying amounts of clay and gravel

Practical refusal was encountered in the CPT at about 85½ feet bgs. Refusal is defined as the depth below the ground surface at which a CPT can no longer be advanced. Refusal is subjective and is based on the type of probing equipment used and the effort exerted by the CPT operator.

Additional borings, auger probes, test pits, or geophysical testing could be performed to obtain more specific subgrade information.

Groundwater Conditions

The boreholes were observed while drilling and after completion for the presence and level of groundwater. Pore pressure dissipation tests were also performed in the CPT to help determine groundwater levels. The water levels observed in the boreholes and CPTs

can be found on the boring/CPT logs in [Exploration and Laboratory Results](#) section of this report and are summarized in the following table.

Boring/CPT Number	Approximate Depth to Groundwater while Drilling ¹ (feet)	Approximate Depth to Groundwater immediately after Drilling ¹ (feet)
B1	30	24.6
CPT-01	24.4	-

1. Below ground surface.

Since the borings were backfilled relatively soon after completion, the water levels summarized in the table for the borings are not stable groundwater levels. Due to the low permeability of soils encountered in the borings, a relatively long period may be necessary for a groundwater level to develop and stabilize in a borehole. Long term observations in piezometers or observation wells sealed from the influence of surface water are often required to define groundwater levels in materials of this type. Long-term groundwater monitoring was outside the scope of services for this project. Terracon is experienced in installing groundwater monitoring wells/piezometers to provide more groundwater data prior to construction if required.

Groundwater conditions may be different at the time of construction. Nearby wells recorded by the California Department of Water Resources were researched for area groundwater levels. State Well No. 02S04E25J001M¹, located approximately ½ mile southwest of the site, indicated a groundwater depth of 19.2 feet bgs in October 1964. The elevations of the monitoring well and the project site are approximately the same. Therefore, we have interpreted the historical high groundwater depth of 19.2 feet bgs to be used for design at the project site.

Groundwater conditions may change because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time the borings and CPTs were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring/CPT logs. The

¹<https://wdl.water.ca.gov/WaterDataLibrary/GroundwaterBrowseData.aspx?LocalWellNumber=&StationId=3003&StateWellNumber=02S04E25J001M&SelectedCounties=&SiteCode=377277N1214775W001&SelectedGWBasins=>

possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

Geologic Setting

The site lies within the Great Valley geomorphic province of California. The Great Valley is an approximately 50-mile wide and 400-mile-long trough located between the topographic highlands of the Sierra Nevada to the east and the Coast Ranges to the west¹. The Great Valley was formed during the Jurassic Era (~150 million years ago) shortly after initial uplift of the Sierra batholith and has accumulated sediment continuously since then. The basin broadly has accumulated sediments consisting of (1) alluvium and basin fill deposited throughout the Cenozoic Era and (2) shallow marine deposits of the Great Valley Sequence which have since lithified; both of which overlie deep basaltic basement rock². The province is drained primarily by two rivers; the Sacramento River on the north side of the basin and the San Joaquin River on the south side, both of which eventually flow into the delta and the San Francisco Bay.

According to the U.S. Geological Survey, the site is located within the Tracy 7.5-minute quadrangle. The mapping by the U.S. Geological Survey (USGS)³ indicates that subsurface conditions at the site consist of Holocene fan and terrace deposits (map unit Qhf), dating to the Holocene Epoch (11,700 years ago to present). The Holocene fan deposits broadly consists of alluvial fan sediments carried by mountain streams. Terrace deposits tend to consist of gravels, sands and silts, while downfan deposition tends to be finer grained. The subsurface conditions encountered in our investigation were generally consistent with the mapped geology.

¹ California Geological Survey, 2002, *California Geomorphic Provinces*, Note 36.

² Wentworth, C.M., Fisher, G.R., Levine, P., and Jachens, R.C., 2012, *The surface of crystalline basement, Great Valley and Sierra Nevada, California*, U.S. Geological Survey, Open-File Report 95-96, Version 1.11.

³ Sowers, J.M., Noller, J.S. and Lettis, W.R., 1993, *Preliminary maps showing Quaternary geology of the Tracy and Midway 7.5-minute quadrangles, California*, U.S. Geological Survey, Open-File Report OF-93-225, Scale 1:24,000.

Geologic Hazards

Faulting and Seismicity

The tectonics of central California area are dominated by the interaction of the North American and Pacific tectonic plates, which are sliding past each other in transform motion. The San Andreas fault zone represents the major surface expression of the tectonic boundary and accommodates a significant portion of the slip between the Pacific and North American plates. Some of the slip is accommodated by other northwest-trending strike-slip faults that are related to the San Andreas system, such as the Concord-Green Valley fault and Hayward fault. The Great Valley thrust fault system marks a boundary between the Coast Ranges and Great Valley geomorphic provinces of California. To the east, the Foothills fault system marks the boundary between the Great Valley and Sierra Nevada geomorphic provinces. A **Regional Fault Map** is attached in the **Figures** section of this report.

The Stockton Fault is a basin structure associated with the Stockton Arch, an ancient antiform at the north end of the San Joaquin structural basin.¹ This fault is buried beneath the alluvium and sediments of the valley and is considered inactive for planning purposes.

Fault Rupture Potential: The site is not located within an Alquist-Priolo Earthquake Fault Zone (APZ) designated by the State of California for active faults.² The closest APZ boundary, associated with the Greenville fault, is located approximately 21 miles (35 km) southwest of the site. Known faults or fault-related features are not located within the site; therefore, the potential for fault rupture within the site is considered low.

The following table summarizes mapped faults within a 100 km radius of the site.

Fault	Distance (km)	Direction	Magnitude ¹	Type
West Tracy	0.2	SW	7.17	Reverse
Midway	6.9	SW	7.13	Strike-Slip
Las Positas	18.7	SW	6.5	Strike-Slip
Great Valley 6 – Midland	20.2	NW	7.15	Reverse

¹ Bartow, J., 1991, *Cenozoic evolution of the San Joaquin Valley, California*, U.S. Geological Survey, Professional Paper 1501.

² California Geological Survey (CGS), "California Earthquakes Hazards Zone Application (EQ Zapp)", 2024 <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/>

Mount Diablo Thrust	31.0	SW	6.72	Thrust
Great Valley 7– Orestimba	34.1	SE	6.9	Reverse
Greenville	34.5	SSW	6.9	Strike-slip
Calaveras	39.3	SW	6.86	Strike-slip
Hayward	47.4	SW	7.58	Strike-slip
Great Valley 5 -Pittsburg – Kirby Hills	47.6	SW	6.6	Reverse
Concord	54.6	NW	6.45	Strike-slip
Ortogonalita	56.5	SE	6.8	Strike-Slip
Great Valley 8 – Quinto	62.8	SE	6.59	Reverse
San Andreas	76.1	SW	8.04	Strike-slip
Foothill Fault System	84.1	NE	6.5 ²	--

¹ Magnitude per BSSC (2014) scenario events (<https://earthquake.usgs.gov/scenarios/catalog/bssc2014>)

² Estimated based on length.

Historical Seismicity:

The following table summarizes significant seismic events in the site region.

Date	Distance from Site (km)	Direction	Magnitude
07-15-1866	4.3	SW	6.3
01-27-1980	20.7	NW	5.4
11-26-1858	38.7	SW	6.2
03-05-1864	39.1	SW	6.0
05-19-1889	50.0	NW	6.0
04-10-1881	50.3	SE	6.0
08-06-1979	69.9	S	5.7
10-08-1865	70.0	SW	6.5
06-25-1838	76.5	SW	7.4
04-30-1892	79.2	NW	5.6
04-19-1892	87.2	NW	6.6
08-24-2014	91.2	NW	6.0
04-18-1906	94.2	W	7.9

A search of the USGS earthquake catalog (USGS, 2024a) for earthquakes of magnitude 4.5 or greater within 100 kilometers of the site returned 125 results including 2 events of magnitude 7 or greater, 17 events of magnitude 6 to 7, 47 events of magnitude 5 to

6, and 59 events of magnitude 4 to 5. A **Regional Seismicity** map based on this data is attached in the **Figures** section of this report.

Based on the seismic setting and history of the greater Bay Area and the San Andreas fault zone, and eastern Great Valley regions near the Foothills fault system, a potential exists for strong ground shaking to occur within the lifetime of the proposed project. Seismic shaking hazard can be addressed by application of building code provisions that consider building use and type, geographic location, site geologic conditions, and distance to seismic sources.

Liquefaction

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils or low plasticity fine grained soils exist below groundwater. The CGS has designated certain areas within California as potential liquefaction hazard zones. These are areas considered at risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table. The project site has not yet been evaluated by the CGS for liquefaction hazards. Additionally, San Joaquin County has not evaluated or mapped liquefaction hazards within the county in the most recent iteration of the Safety Element. However, due to the relatively young geologic age of the subgrade soils and depth to groundwater, a liquefaction evaluation for this site was performed. Details regarding the liquefaction evaluation are presented in the **Liquefaction Evaluation** section of this report.

Inundation by Tsunamis and Seiches

Tsunamis are long period waves that travel through large bodies of water (generally oceans), usually produced by a submarine earthquake, volcanic eruption, or landslide. Seiches are an oscillation of a body of water in an enclosed or semi-enclosed basin, mainly caused by local changes in atmospheric pressure aided by tidal currents, winds, and occasionally by earthquakes and landslides. Areas that are low lying in elevation and sufficiently near the affected large body of water can quickly be inundated by tsunami or seiche waves. The site is not within a low-lying coastal area and there are no bodies of water in the immediate vicinity of the site; therefore, tsunamis and seiches are not a potential hazard to the site.

Flooding

Dam inundation from reservoirs impounded by dams in the Sierra Nevada east of the site and the coastal range to the west including New Melones dam and New Hogan dam

may pose a threat to the Tracy area (Tracy General Plan 2015 and <https://fmds.water.ca.gov/maps/damim>). These dams are monitored by State and/or Federal agencies for seismic safety.

Based on a review of the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL), the project site is in an area with a FEMA Flood Zone X designation, specified as an area of minimal flood hazard.

Landslides, Lateral Spreading, and Debris Flow

The CGS has designated certain areas within California as potential seismically-induced landslide hazard zones. These are areas considered at risk of slope failure and permanent ground displacement during a seismic event based upon previous occurrence of instability, topographic, geologic, and groundwater conditions, and ground shaking potential. The project site has not yet been evaluated by the CGS for seismically-induced landslide hazards.

Lateral spreading and debris flows are specific types of landslide-related earth movement. Lateral spreading generally occurs when a liquefiable layer of soil daylight at the free face of a slope, such as an excavation or a stream channel. During a seismic event and ensuing liquefaction, the lack of lateral confinement of the layer causes overlying strata to flow, typically as block failures, towards the slope face. Debris flows are typically triggered along steeply sloping ground during particularly heavy rainfall events. Rain waters mobilize loose material downslope, which then funnels into existing steep-sided channels and is deposited at great velocity at the base of the slope.

The site resides on a relatively gentle grade which trends down to the northeast. Topographic relief across the site measures less steep than 100H:1V (Horizontal:Vertical). Given that the site and its surroundings are relatively flat; seismically-induced landslides and lateral spreading are not considered a potential hazard. Since the site and surrounding area is relatively flat and there are no steep, narrow channels near the site, debris flows are not considered a potential hazard.

Expansive Soils

Expansive soil-related hazards may be present on sites with high concentrations of certain clay minerals deposited near the surface. Soils bearing montmorillonite clay minerals in particular may be subject to dramatic shrinking and swelling depending on changes to the soil moisture content. Shrinking and swelling of clay soils can manifest at the surface over time as distress to hardscape surfaces and shallow foundations. The shrink and swell of soil is largely based upon seasonality, but can also be influenced by drainage patterns, ground cover, and other factors.

The near-surface soil at the site consists predominantly of surficial lean clay and sandy lean clays extending to our maximum exploratory depth of approximately 85 feet bgs. Atterberg Limits testing performed on the near-surface soil resulted in a liquid limit (LL) of 46 and a plasticity index (PI) of 28. This result indicates that the material has moderate plasticity. An Expansion Index test was also performed on the near surface soils in Boring B2. The Expansion Index testing of the soil yielded a result of 107. The Atterberg limits and Expansion Index testing performed on the near surface soil indicate that it has high expansion potential. Based on the laboratory test results, we anticipate the onsite surficial soil will have high potential for expansion.

Due to the high potential for expansion of the surficial soils, we recommend mitigation during construction of the project, presented in **Expansive Soils**. The recommendations contained in this report are based upon the results of field and laboratory testing (presented in the **Exploration and Laboratory Results**), engineering analyses, and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

Subsidence Potential

Subsidence due to fluid withdrawal (groundwater, oil, gas) or peat oxidation is not documented in the site area (USGS, 2024b, 2018 and City of Modesto, 2019). The potential for subsidence to affect the proposed project is low.

While subsidence is potentially damaging to aerially extensive structures, such as irrigation ditches or large water lines, damage to the proposed structures (having relatively small footprint areas) is not anticipated due to the distributed nature of subsidence phenomenon. Organic-rich soils with significant collapse potential were not encountered during our exploration and are not anticipated to be present in the general area of the site. Therefore, the potential for local or regional subsidence effects at the site is considered low.

Erosion Potential

The subject site is covered with pavements, landscape turf, and other vegetation. Erosion by wind and water is not considered to be a hazard at the site.

Volcanic Hazards

Volcanic hazards in California include the Clear Lake volcanic field, Lassen volcano center, and Long Valley volcanic region located approximately 108 miles northwest, 189

miles north and 143 miles east of the site, respectively. These sources are described as “high to very high” threat sources and are monitored by U.S. Geological Survey¹

The probability of a small to medium size volcanic eruption in California over the next 30 years is estimated to be about 16 percent, which is similar to the estimated likelihood of a moderate magnitude earthquake on the San Andreas fault² over an approximately similar time frame. Based on our review of available literature from the USGS, the site is not located within an area designated as a volcanic hazard zone.

Radon

Radon is an odorless and invisible naturally occurring carcinogenic gas produced by the decay of uranium and radium. It is the second leading cause of lung cancer in the United States. In accordance with Sections 307 and 309 of the Indoor Radon Abatement Act of 1988 (IRAA), the EPA identified areas within the United States with the potential for elevated indoor radon levels. An assessment of geologic radon potential in California³ indicates that San Joaquin County has low radon potential. The EPA Map of Radon Zones in California assigns each county to one of three zone designations based on radon potential. The site location (San Joaquin County) is mapped as Zone 3, indicating that it has a low potential for radon and average indoor radon levels may be less than 2 pCi/L.

Naturally Occurring Asbestos (NOA)

Asbestos minerals naturally form during metamorphosis of ultramafic igneous rock formations. Asbestos minerals in rock are grouped as either serpentine (chrysotile) or amphibole (amosite, crocidolite, tremolite, anthophyllite, and actinolite) minerals. The most common asbestos mineral in California is chrysotile, found within serpentinite rock.

¹ California Volcano Observatory, *Map of moderate, high, and very high threat volcanos in CA*, <https://www.usgs.gov/media/images/map-moderate-high-and-very-high-threat-volcanoes-ca>

² Mangan, M., Ball, J., Wood, N., Jones, J.L., Peters, J., Abdollahian, N., Dinitz, L., Blankenheim, S., Fenton, J., and Pridmore, C. (2019); *California's exposure to volcanic hazards (ver. 1.1, December 2019)*; U.S. Geological Survey (USGS); Scientific Investigations Report 2018-5159; hazard zones in figure 8.

³ Schumann, R. Randall (1993); *Geologic Radon Potential of EPA Region 9, Arizona, California, Hawaii, and Nevada*; U.S. Geological Survey (USGS); Open-File Report 93-292-I; pp. 70-93.

Chrysotile occurs as very narrow tubular fibers that are often hollow. Based on a review of available literature¹, the site does not lie within a mapped area containing NOA.

Oil and Gas Exploration

According to available mapping by the California Division of Oil, Gas and Geothermal Resources, the subject property is not located within, or near, any gas or oil production area. Plugged and abandoned dry wells are mapped approximately 0.75 miles southeast and southwest from the site (CalGEM, 2025). We do not consider oil- or gas-related hazards to be potential hazards at the site. An **Oil and Gas Map** is attached in the **Figures** section of this report.

Seismic Considerations

The San Joaquin Valley of California is a moderate seismicity region, being bracketed by the Foothills and San Andreas fault systems. The type and magnitude of seismic hazards affecting the site are dependent on the distance to causative faults, the intensity, and the magnitude of the seismic event. The following table indicates the distance of the fault zones and the associated maximum considered earthquake produced by nearby seismic events, as calculated using the USGS Earthquake Hazard Toolbox². Segments of the Great Valley 7 Fault, which is located approximately 8¼ kilometers from the site, are considered to have the most significant effect at the site from a design standpoint.

Fault Name	Approximate Contribution (%)	Approximate Distance to Site (kilometers)	Maximum Considered Earthquake (MCE) Magnitude
Grid Source Seismicity	39.64	N/A	5.88
Great Valley 7	25.17	8.31	6.32
Greenville	17.77	17.75	7.09

¹ Ronald K. Churchill and Robert L. Hill, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*, CGS Open-File Report 2000-19.

² U.S. Geological Survey, *USGS Earthquake Hazard Toolbox: Disaggregation*, July 2025
<https://earthquake.usgs.gov/nshmp/hazard/disagg>

Based on the USGS 2018 interactive disaggregations, the PGA at the subject site for a 2% probability of exceedance in 50 years (return period of 2475 years) is expected to be about 0.641g. Based on the ASCE 7-22 Standard, the site-modified peak ground acceleration (PGA_M) for evaluation of seismic soil effects and design for the subject site is 0.64g.

The seismic site class was determined according to ASCE 7-22, Chapter 20 by evaluation of seismic shear wave velocity measurements in CPT-1 that indicated a weighted shear wave velocity average within the upper 100 feet of the site subsurface as $V_s = 1,162$ feet/second. This velocity is within the range of Site Class CD defined in ASCE 7-16, Chapter 20.

The 2025 CBC Seismic Design Parameters have been generated using the ASCE Hazard Tool. This web-based software application calculates seismic design parameters in accordance with ASCE 7-22, and 2025 CBC.

Description	Value
2025 CBC Site Class ¹	CD
Risk Category	III
Site Latitude ²	37.7321°N
Site Longitude ²	121.4729°W
Mapped Spectral Acceleration Parameters ³	$S_s = 1.43$ and $S_1 = 0.42$
Spectral Response Acceleration Parameters ³	$S_{MS} = 1.65$ and $S_{M1} = 0.86$
Design Spectral Acceleration Parameters ³	$S_{DS} = 1.1$ and $S_{D1} = 0.57$

1. Seismic site class in general accordance with the 2025 CBC, which refers to ASCE 7-22, Chapter 20. The site class is required to determine the Seismic Design Category for a structure.
2. Provided coordinates represent a point located at the general center of the site.
3. These values were obtained using online seismic design maps and tools provided by ASCE (<https://ascehazardtool.org/>).

Typically, a site-specific ground motion study may reduce construction costs. We recommend consulting with a structural engineer to evaluate the need for such a study and its potential impact on construction costs. Terracon should be contacted if a site-specific ground motion study is desired.

Liquefaction Evaluation

We performed a liquefaction hazard evaluation in general compliance with the CGS Special Publication 117A (2008) and the Southern California Earthquake Center (SCEC) "Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Liquefaction Hazards in California," 1999 report.

As recommended in these publications, we performed a screening analysis to determine if there is a potential for liquefaction to occur at the site. We evaluated the soils encountered in our borings advanced to a maximum depth of 51½ feet bgs and CPT advanced to a depth of approximately 85½ feet bgs. We evaluated these soils based on geologic age, soil classification, historically high groundwater elevation, water content, Atterberg limits, and CPT data.

As part of the screening analysis, we reviewed the shear wave velocities measured during advancement of our CPT. The shear wave velocities measured in the upper 50 feet of the CPT generally varied from 898 feet per second (ft/s) to 1,523 ft/s. Based on research by Andrus et al. (2009), it has been accepted that soils with shear wave velocities greater than 720 ft/s are generally not susceptible to liquefaction. Based on this criterion, the soils encountered in CPT-01 would not be susceptible to liquefaction.

Given that the soil in CPT-01 is not susceptible to liquefaction based on shear wave velocity, the potential for liquefaction to occur at the site is low.

Liquefaction can manifest as sand or mud boils, or as bearing capacity failure of the ground surface. As the potential for liquefaction to occur at the site is low, and the near surface material is composed of cohesive lean clay, the potential for liquefaction-induced ground surface disruption is low.

During a seismic event, there is the potential for seismic densification of coarse-grained soil above the groundwater table. Due to the shear wave velocities of the soil above the groundwater table being greater than 720 ft/s, the potential for seismic densification at the site is low.

Corrosivity

The following table lists the results of laboratory soluble sulfate, soluble chloride, electrical resistivity, and pH testing. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Corrosivity Test Results Summary

Boring	Sample Depth (feet)	Soil Description	Soluble Sulfate (%)	Soluble Chloride (%)	Electrical Resistivity (Ω -cm)	pH
B1	5	Lean Clay	0.0642	0.0001	540	7.6

Results of soluble sulfate testing can be classified in accordance with ACI 318 – Building Code Requirements for Structural Concrete. Numerous sources are available to characterize corrosion potential to buried metals using the parameters presented in the previous table. ANSI/AWWA is commonly used for ductile iron, while threshold values for evaluating the effect on steel can be specific to the buried feature (e.g., piling, culverts, welded wire reinforcement, etc.) or agency for which the work is performed. Imported fill materials may have significantly different properties than the site materials noted in the table and should be evaluated if expected to be in contact with metals used for construction. Consultation with a NACE certified corrosion professional is recommended for buried metals on the site.

Mapping by the NRCS includes qualitative severity of corrosion to concrete and steel. This source rates the near-surface materials as “Low” for corrosion to concrete and “High” for corrosion of steel.

Geotechnical Overview

The subject site has geotechnical considerations that will affect the construction and performance of the proposed improvements that are discussed in this report. The primary geotechnical considerations that have been identified at the subject site that may affect development are the following:

- Soft/Unstable subgrade
- Expansive soils

Soft/Unstable Subgrade

Medium stiff clay was noted near the surface in our soil borings. These soils may become unstable when disturbed. During periods of dry weather, these soils may be stable upon initial exposure, however, these soils could become relatively soft and unstable under construction traffic. Furthermore, depending upon site conditions during construction, over-excavation, or stabilization of the subgrade and/or base of overexcavations may be needed to achieve a suitable working surface. Accordingly, we recommend that the owner budget for the possibility that overexcavation and/or stabilization may be

required, and contractors be prepared to handle potentially unstable and/or soft conditions. Stabilization may consist of aerating/drying the soil, a composite section of aggregate base and geogrid, or chemical stabilization using high calcium quick lime or Portland cement.

Expansive Soils

Expansive soils are present on this site. Atterberg Limits tests indicate a liquid limit of 46 and a plasticity index of 28. An Expansion Index of soils test was also performed on the near surface soils in boring B2. The Expansion Index testing yielded a result of 107, indicating high expansion potential. This report provides recommendations to help mitigate the effects of soil shrinkage and expansion. However, even if these procedures are followed, some movement and (at least minor) cracking in the structure should be anticipated. The severity of cracking and other damage such as uneven floor slabs will probably increase if modification of the site results in excessive wetting or drying of the expansive soils. Eliminating the risk of movement and distress may not be feasible, but it may be possible to further reduce the risk of movement if significantly more expensive measures are used during construction. Some of these options are discussed in this report such as complete replacement of expansive soils.

The near surface, medium plasticity lean clay could become unstable with typical earthwork and construction traffic, especially after precipitation events. Effective drainage should be installed early in the construction sequence and maintained after construction to avoid potential issues. If possible, site grading should be performed during the warmer and drier times of the year. If grading is performed during the winter months, an increased risk for possible undercutting and replacement of unstable subgrade will persist. Additional site preparation recommendations, including subgrade improvement and fill placement, are provided in the **Earthwork** section.

The soils which form the bearing stratum for shallow foundations are plastic and exhibit potential for shrink-swell movements with changes in moisture. Maintaining above optimum moisture conditions in the bearing soils and a minimum dead load pressure on footings should reduce the anticipated swell movements to tolerable levels. The **Shallow Foundations** section addresses support of the building directly bearing on granular structural fill. We do not expect significant dead load on the floor slabs and recommend either overexcavation of near-surface clays to reduce the heave potential or use of suspended slabs to accommodate potential ground heave. The **Floor Slabs** section addresses slab-on-grade support of the building using overexcavation techniques.

The recommendations contained in this report are based upon the results of field and laboratory testing (presented in **Exploration and Laboratory Results**), engineering analyses, and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

Earthwork

We anticipate grading will consist of cuts and fills on the order of 2 feet or less and that site grades will remain near the existing elevation. Specific site grading information was unavailable at the time this report was prepared. If elevation and site grading differ from our stated assumptions, Terracon should be contacted to determine if additional earthwork recommendations are warranted, particularly with regard to potential ground settlement.

Earthwork is anticipated to include demolition, clearing and grubbing, excavations, and structural fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations and floor slabs.

Demolition

The proposed building will be constructed within the footprint of an existing building which will need to be demolished, along with exterior sidewalks, pavements, and utilities. We recommend existing foundations, slabs, and utilities be removed from within the proposed building footprint and at least 5 feet beyond the outer edge of foundations. This should include removal of any loose backfill found adjacent to existing foundations. If pipes are abandoned in-place, they should be filled completely with lean cement grout, or other suitable material, to avoid collapse in the future. All materials derived from the demolition of existing structures and pavements should be removed from the site and not be allowed for use as on-site fill, unless processed in accordance with the fill requirements included in this report.

For areas outside the proposed building footprints and foundation bearing zones, existing foundations, floor slabs, and utilities should be removed where they conflict with proposed utilities, retaining walls, and pavements. In such cases, existing foundations, floor slabs, and utilities should be removed to a depth of at least 2 feet below the affected utility or design subgrade elevation.

Site Preparation

Prior to placing fill, existing vegetation, topsoil, and root mats should be removed. Complete stripping of the topsoil should be performed in the proposed building and parking/driveway areas. Stripping should extend laterally a minimum of 5 feet beyond the limits of proposed improvements.

Mature trees are located within or near the footprint of some of the proposed buildings, which will require removal at the onset of construction. Tree root systems can remove

substantial moisture from surrounding soils. Where trees are removed, the full root ball, including roots ¼-inch in diameter and larger and all associated dry and desiccated soils should be removed. The soil materials which contain less than 3 percent organics can be reused as structural fill provided the material is moisture conditioned and properly compacted.

Underground facilities (such as utilities) were observed during the exploration and site reconnaissance and such features are anticipated to be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

Subgrade Preparation

After clearing, any required cuts and overexcavation should be made.

We recommend that the soil within the footprint of the proposed structures be removed to a minimum depth of 2 feet below the bottom of footings, or 4 feet bgs, whichever is deeper. Structural fill placed beneath the entire footprint of the foundations should extend horizontally a minimum distance of 5 feet beyond the outside edge of footings. The near-surface materials anticipated to be developed as excavation spoils are not considered suitable for use as structural fill.

Subgrade soils beneath proposed floor slabs and exterior hardscape should be removed to a depth of 18 inches beneath proposed slab or hardscape section, or existing grade, whichever is greater and either replaced with granular structural fill or chemically stabilized native soil.

Excavated material may be stockpiled for use as fill provided it is cleaned of organic material, debris, and any other deleterious material and meets the criteria for general or structural fill specified in the **Fill Material Types** section of this report.

Once cuts and overexcavation operations are complete, all exposed areas which will receive fill, once properly cleared and benched where necessary, should be scarified, moisture conditioned as necessary, and compacted per the compaction requirements in this report. The depth of scarification of subgrade soils and moisture conditioning of the subgrade is highly dependent upon the time of year of construction and the site conditions that exist immediately prior to construction. If construction occurs during the winter or spring, when the subgrade soils are typically already in a moist condition, scarification and compaction may only be 8 inches. If construction occurs during the summer or fall when the subgrade soils have been allowed to dry out deeper, the depth of scarification and moisture conditioning may be as much as 18 inches or more. A representative from Terracon should be present during earthwork to observe the

exposed subgrade and confirm the depth of scarification and moisture conditioning required.

Following scarification, moisture conditioning, and compaction of the subgrade soils, the resulting subgrade should be proofrolled with an adequately loaded vehicle such as a fully-loaded tandem-axle dump truck. The proofrolling should be performed under the observation of the Geotechnical Engineer or their representative. Areas excessively deflecting under the proofroll should be delineated and subsequently addressed by the Geotechnical Engineer. Such areas should either be removed or modified by stabilizing as noted in the **Soil Stabilization** section of this report. Excessively wet or dry material should either be removed, or moisture conditioned and recompacted.

Once proof rolling has been performed, compacted structural fill soils should then be placed to the proposed design grade and the moisture content and compaction of subgrade soils should be maintained until foundation, floor slab, or flatwork construction.

Based upon the subsurface conditions determined from the geotechnical exploration, subgrade soils exposed during construction are anticipated to be relatively workable; however, the workability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unworkable conditions develop, workability may be improved by scarifying and drying.

Excavation

We anticipate that excavations for the proposed construction can be accomplished with conventional earthmoving equipment. The bottom of excavations should be thoroughly cleaned of loose soils and disturbed materials prior to backfill placement and/or construction.

Individual contractors are responsible for designing and constructing stable, temporary excavations. Excavations should be sloped or shored in the interest of safety following local, state, and federal regulations, including current OSHA excavation and trench safety standards.

Soil Stabilization

Methods of subgrade stabilization, as described in this section, could include scarification, moisture conditioning and recompaction, removal of unstable materials and replacement with granular fill (with or without geosynthetics), and chemical stabilization. The appropriate method of improvement, if required, would be dependent on factors such as schedule, weather, the size of area to be stabilized, and the nature of the instability. More detailed recommendations can be provided during construction as the

need for subgrade stabilization occurs. Performing site grading operations during warm seasons and dry periods would help reduce the amount of subgrade stabilization required.

If the exposed subgrade is unstable during proofrolling operations, it could be stabilized using one of the following methods:

- **Scarification and Recomaction** - It may be feasible to scarify, dry, and recompact the exposed soils. The success of this procedure would depend primarily upon favorable weather and sufficient time to dry the soil. Stable subgrades likely would not be achievable if the thickness of the unstable soil is greater than about 1 foot, if the unstable soil is at or near groundwater levels, or if construction is performed during a period of wet or cool weather when drying is difficult.
- **Aggregate Base** - The use of Caltrans Class II aggregate base is a common procedure to improve subgrade stability. Typical undercut depths would be expected to range from about 6 to 18 inches below finished subgrade elevation. The use of high modulus geosynthetics (i.e., engineering fabric or geogrid) could also be considered after underground work such as utility construction is completed. Prior to placing the fabric or geogrid, we recommend that all below grade construction, such as utility line installation, be completed to avoid damaging the fabric or geogrid. Equipment should not be operated above the fabric or geogrid until one full lift of aggregate base is placed above it. The maximum particle size of granular material placed over geotextile fabric or geogrid should meet the manufacturer's specifications.
- **Chemical Stabilization** - Improvement of subgrades with Portland cement or quicklime could be considered for improving unstable soils. Chemical stabilization should be performed by a pre-qualified contractor who has experience with successfully stabilizing subgrades in the project area on similar sized projects with similar soil conditions. The hazards of chemicals blowing across the site or onto adjacent property should also be considered. Additional testing would be needed to develop specific recommendations to improve subgrade stability by blending chemicals with the site soil. Additional testing could include, but not be limited to, determining the most suitable stabilizing agent, the optimum amounts required, and the presence of sulfates in the soil. If this method is chosen to stabilize subgrade soils the actual amount of high calcium quicklime or Portland cement to be used should be determined by Terracon and by laboratory testing at least three weeks prior to the start of grading operations.

Further evaluation of the need and recommendations for subgrade stabilization can be provided during construction as the geotechnical conditions are exposed.

Fill Material Types

Fill required to achieve design grades should be classified as structural fill and general fill. Structural fill is material used below, or within 5 feet of structures. General fill is material used to achieve grade outside of these areas.

Reuse of On-Site Soil: Excavated on-site soil is not suitable for reuse as Structural Fill and should not be placed beneath settlement sensitive structures and within foundation bearing zones. Material property requirements for on-site soil for use as general fill and structural fill are noted in the following table:

Property	Structural Fill	General Fill
Composition	Free of deleterious material	Free of deleterious material
Maximum particle size	3 inches	6 inches (or 2/3 of the lift thickness)
Fines content	Less than 40% passing No. 200 sieve	Not limited
Plasticity	Maximum liquid limit of 30 Maximum plasticity index of 10 Expansion Index less than 20	Not limited
GeoModel Layer Expected to be Suitable ¹	2, 3	1, 2, 3

1. Based on subsurface exploration. Actual material suitability should be determined in the field at time of construction.

Imported Fill Materials: Imported fill materials should meet the following material property requirements. Regardless of its source, compacted fill should consist of approved materials that are free of organic matter and debris. For all import material, the contractor shall submit current verified reports from a recognized analytical laboratory indicating that the import has a “not applicable” (Class S0) potential for sulfate attack based upon current ACI criteria and is “mildly corrosive” to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the project.

Soil Type ¹	USCS Classification	Acceptable Parameters (for Structural Fill)
Low Plasticity	CL, SC	Liquid Limit less than 30 Plasticity index less than 10 Expansion index less than 20 Less than 70% passing No. 200 sieve
Granular ²	GW, GM, SW, SM	Less than 40% passing No. 200 sieve

1. Structural and general fill should consist of approved materials free of organic matter and debris and should contain no material larger than 3 inches and 6 inches in greatest dimension, respectively. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation at least two weeks prior to use on this site. Additional geotechnical consultation should be provided prior to use of uniformly graded gravel on the site.
2. Caltrans Class II aggregate base may be used for this material. Recycled aggregate base should not be used without prior approval by the Geotechnical Engineer.

Fill Placement and Compaction Requirements

Compacted native soil and structural and general fill should meet the following compaction requirements.

Item	Structural Fill	General Fill
Maximum Lift Thickness	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used	Same as structural fill
Minimum Compaction Requirements ^{1,2}	95% of max. for structural fill below foundations and slabs, within 1 foot of finished pavement subgrade, for aggregate base and chemically treated soil, and for fills deeper than 5 feet 90% of max. for all other locations	90% of max.
Water Content Range ¹	Low plasticity cohesive: +1% to +3% above optimum Granular: -2% to +2% of optimum	As required to achieve min. compaction requirements

Item	Structural Fill	General Fill
1.	Maximum density and optimum water content as determined by the Modified Proctor test (ASTM D 1557).	
2.	If the granular material is a coarse sand or gravel, or of a uniform size, or has a low fines content, compaction comparison to relative density may be more appropriate. In this case, granular materials should be compacted to at least 70% relative density (ASTM D 4253 and D 4254). Materials not amenable to density testing should be placed and compacted to a stable condition observed full time by the Geotechnical Engineer or representative.	

Utility Trench Backfill

Any soft or unsuitable materials encountered at the bottom of utility trench excavations should be removed and replaced with structural fill or bedding material in accordance with public works specifications for the utility to be supported. This recommendation is particularly applicable to utility work requiring grade control and/or in areas where subsequent grade raising could cause settlement in the subgrade supporting the utility. Trench excavation should not be conducted below a downward 1:1 projection from existing foundations without engineering review of shoring requirements and geotechnical observation during construction.

On-site materials are considered suitable for backfill of utility and pipe trenches from 1 foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances. Where trenches are placed beneath slabs or footings, the backfill should satisfy the gradation and Atterberg limit requirements for structural fill discussed in this report.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Flooding or jetting for placement and compaction of backfill is not recommended.

All trench excavations should be made with sufficient working space to permit construction including backfill placement and compaction. If utility trenches are backfilled with relatively clean granular material, they should be capped with at least 18 inches of cementitious flowable fill or cohesive fill in non-pavement areas to reduce the infiltration and conveyance of surface water through the trench backfill. Attempts should also be made to limit the amount of fines migration into the clean granular material. Fines migration into clean granular fill may result in unanticipated localized settlements over a period of time. To help limit the amount of fines migration, Terracon recommends the use of a geotextile fabric that is designed to prevent fines migration in areas of contact between clean granular material and fine-grained soils. Terracon also recommends that clean granular fill be tracked or tamped in place, where possible, to

limit the amount of future densification which may cause localized settlements over time.

For low permeability subgrades, utility trenches are a common source of water infiltration and migration. Utility trenches penetrating beneath the building should be effectively sealed to restrict water intrusion and flow through the trenches, which could migrate below the building. The trench should provide an effective trench plug that extends at least 5 feet from the face of the building exterior. The plug material should consist of cementitious flowable fill or low permeability clay. The trench plug material should be placed to surround the utility line. If used, the clay trench plug material should be placed and compacted to comply with the water content and compaction recommendations for structural fill stated previously in this report.

Grading and Drainage

All grades must provide effective drainage away from the building during and after construction and should be maintained throughout the life of the structure. Water retained next to the building can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roof should have gutters/drains with downspouts that are tied to tight lines that discharge into a storm drain system.

Exposed ground should be sloped and maintained at a minimum 5 percent away from the building for at least 10 feet beyond the perimeter of the building. If a minimum 5 percent slope cannot be achieved due to site grades, a minimum 2 percent slope could be used provided pavement or hardscape surrounds and extends to the building, or a subdrain could be installed around the perimeter of the foundations that carries water away from the building. Locally, flatter grades may be necessary to transition to ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structure, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

Any planters and/or bio-swales located within 10 feet of the building should be self-contained or lined with an impermeable membrane to prevent water from accessing subgrade soils below the building. Sprinkler mains and spray heads should be located a minimum of 5 feet away from the foundation lines.

No vegetation over 6 feet in height shall be planted within 20 feet of the building perimeter unless a root barrier is provided between the structure and tree to limit roots

within 10 feet of the building. Roots can draw additional moisture from the soil and cause excessive volume changes in the soil resulting in building movement.

Implementation of adequate drainage for this project can affect the surrounding developments. Consequently, in addition to designing and constructing drainage for this project, the effects of site drainage should be taken into consideration for the planned structures on this property, the undeveloped portions of this property, and surrounding sites. Extra care should be taken to ensure irrigation and drainage from adjacent areas do not drain onto the project site or saturate the construction area.

Earthwork Construction Considerations

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of grade-supported improvements such as floor slabs and exterior hardscape. Construction traffic over the completed subgrades should be avoided to the extent practical. The site should also be graded to prevent ponding surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade should become desiccated, saturated, or disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted prior to construction.

We recommend that the earthwork portion of this project be completed during extended periods of dry weather if possible. If earthwork is completed during the wet season (typically November through April) it may be necessary to take extra precautionary measures to protect subgrade soils. Wet season earthwork operations may require additional mitigation measures beyond that which would be expected during the drier summer and fall months. This could include ground stabilization utilizing chemical treatment of the subgrade, diversion of surface runoff around exposed soils, and draining of ponded water on the site. Once subgrades are established, it may be necessary to protect the exposed subgrade soils from construction traffic.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local and/or state regulations. Stockpiles of soil, construction materials, and construction equipment should not be placed near trenches or excavations. ***The Contractor is responsible for maintaining the stability of adjacent structures during construction.***

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming

responsibility for construction site safety or the contractor's activities; such responsibility shall neither be implied nor inferred.

Excavations or other activities resulting in ground disturbance have the potential to affect adjoining properties and structures. Our scope of services does not include the review of available final grading information or considering potential temporary grading performed by the contractor for potential effects such as ground movement beyond the project limits. A preconstruction/precondition survey should be conducted to document nearby property/infrastructure prior to any site development activity. Excavation or ground disturbance activities adjacent or near property lines should be monitored or instrumented for potential ground movements that could negatively affect adjoining property and/or structures.

Construction Observation and Testing

The earthwork efforts should be observed by the Geotechnical Engineer (or others under their direction). Observation should include documentation of adequate removal of surficial materials (vegetation, topsoil, debris, and pavements), evaluation and remediation of existing fill materials, as well as proofrolling and mitigation of unsuitable areas delineated by the proofroll.

Each lift of compacted fill should be tested, evaluated, and reworked, as necessary, as recommended by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,000 square feet of compacted fill in the building areas. Where not specified by local ordinance, one density and water content test should be performed for every 50 linear feet of compacted utility trench backfill and a minimum of one test performed for every 12 vertical inches of compacted backfill. The frequency of the testing may be adjusted during construction under the direction of the geotechnical engineer.

In areas of foundation excavations, the bearing subgrade should be evaluated by the Geotechnical Engineer. If unanticipated conditions are observed, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

Shallow Foundations

The proposed building may be supported by spread footings. If the site has been prepared in accordance with the requirements noted in [Earthwork](#), the following design parameters are applicable for shallow foundations.

Design Parameters – Compressive Loads

Item	Description
Maximum Net Allowable Bearing Pressure^{1, 2}	2,000 psf
Required Bearing Stratum³	2 feet of compacted granular structural fill
Minimum Foundation Dimensions	Per CBC 1809A.7
Maximum Foundation Dimensions	Columns: 8 feet Continuous: 4 feet
Passive Resistance^{4, 8} (equivalent fluid pressures)	300 pcf
Sliding Resistance^{5, 8}	0.35 allowable coefficient of friction - granular material
Minimum Embedment below Finished Subgrade⁶	24 inches
Estimated Total Settlement from Structural Loads²	Less than about 1 inch
Estimated Differential Settlement^{2, 7}	About ½ of total settlement

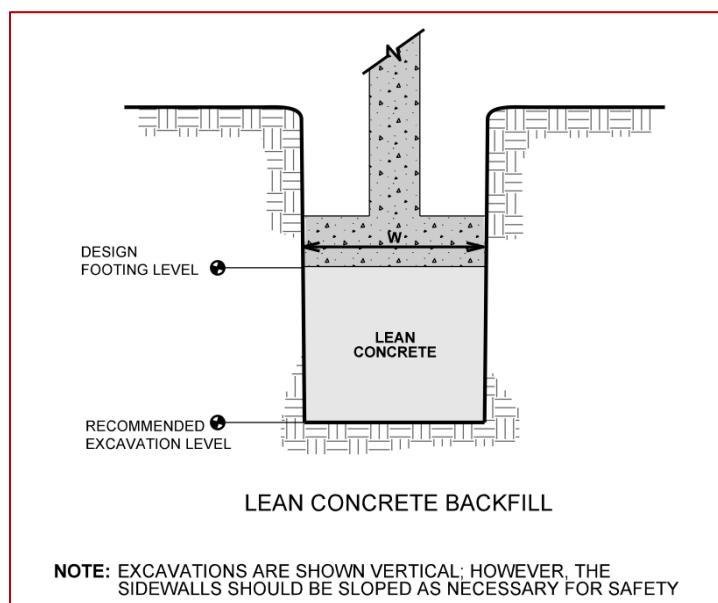
1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. This bearing pressure can be increased by 1/3 for transient loads unless those loads have been factored to account for transient conditions. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for maximum loads noted in [Project Description](#). Additional geotechnical consultation will be necessary if higher loads are anticipated.
3. Unsuitable or soft soils should be overexcavated and replaced per the recommendations presented in [Earthwork](#).
4. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face. Assumes no hydrostatic pressure.
5. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Frictional resistance for granular materials is dependent on the bearing

Item	Description
	pressure which may vary due to load combinations. For fine-grained materials, lateral resistance using cohesion should not exceed $\frac{1}{2}$ the dead load.
6.	Embedment necessary to minimize the effects of seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior subgrade within 5 horizontal feet of the structure.
7.	Differential settlements are noted for equivalent-loaded foundations and bearing elevation as measured over a span of 50 feet.
8.	Passive Resistance and Sliding Resistance may be combined to resist sliding provided the Passive Resistance is reduced by 50 percent.

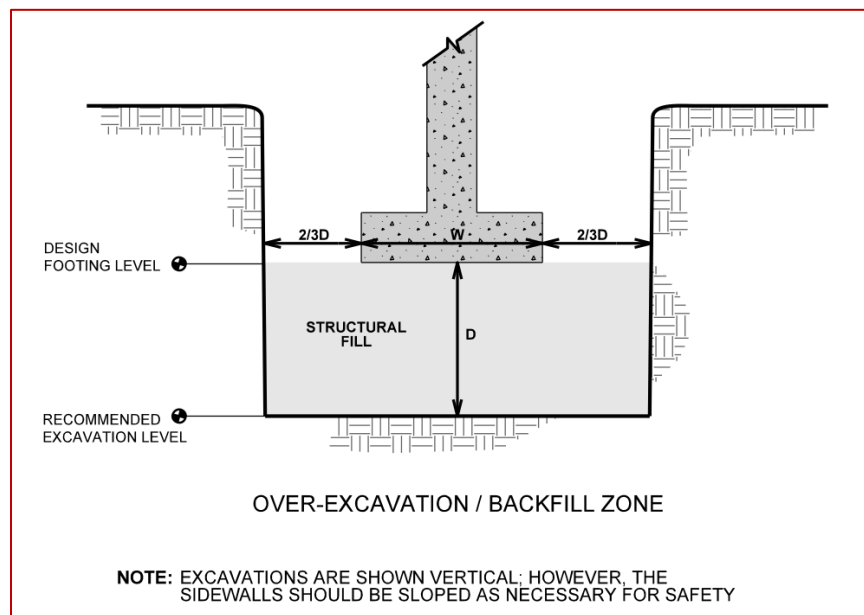
Foundation Construction Considerations

As noted in **Earthwork**, the footing excavations should be evaluated under the observation of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

If unsuitable bearing soils are observed at the base of the planned footing excavation, the unsuitable soils should be removed and replaced with compacted granular structural fill or lean concrete backfill placed in the excavations. The lean concrete replacement zone is illustrated on the following sketch.



Overexcavation for structural fill placement below footings should be conducted as shown in the following sketch. The overexcavation should be backfilled up to the footing base elevation, with structural fill placed, as recommended in the **Earthwork** section.



To ensure foundations have adequate support, special care should be taken when footings are located adjacent to trenches. The bottom of such footings should be at least 1 foot below an imaginary plane with an inclination of 1.5 horizontal to 1.0 vertical extending upward from the nearest edge of the adjacent trench.

Floor Slabs

Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the floor slab support course beneath the floor slab.

The subgrade soils are comprised of lean clays exhibiting the potential to shrink/swell with variations in water content. Construction of the floor slab, combined with the removal of trees, and revising site drainage creates the potential for gradual increased water contents within the clays. Increases in water content will cause the clays to swell and damage the floor slab. To reduce the potential effects of the lean clays on the building floor slabs, at least the upper 18 inches of subgrade soils below the floor slab should consist of granular structural fill or be chemically treated with high calcium quicklime.

Chemical treatment involves treating the subgrade soils with a certain percentage of high calcium quicklime, usually 3.5 to 5.5 percent based on the dry unit weight of the

soil, for a depth of 18 inches. For estimating purposes, we recommend using 4.5 percent lime, and a soil unit weight of 110 pounds per cubic foot. For an 18-inch treatment depth, this results in an estimated minimum spread rate of 7.4 pounds per square foot lime. The actual amount of lime to be used should be determined by Terracon and by laboratory testing at least three weeks prior to the start of grading operations.

Chemical treatment is performed after rough grading is completed. This procedure reduces the swell potential of the surface soils and creates a stable working platform on which construction can proceed. All chemical treatment operations should be observed by a representative of the project Geotechnical Engineer.

Due to the potential for significant moisture fluctuations of subgrade material beneath floor slabs supported at-grade, the Geotechnical Engineer should evaluate the material within 12 inches of the bottom of the structural granular fill or chemically treated zone immediately prior to placement of additional fill or floor slabs. In chemically treated areas, this can be accomplished by having the grading contractor excavate several test pits within the proposed construction areas prior to the start of grading operations to determine the moisture condition of the subgrade soils. A representative of the Geotechnical Engineer should be present during the excavation of these test pits and samples of the subgrade soils should be obtained for moisture content testing. Soils below the specified water contents within this zone should be moisture conditioned or replaced with structural fill as stated in our **Earthwork** section.

Floor Slab Design Parameters

Item	Description
Floor Slab Support¹	Use 4 inches of $\frac{3}{4}$ inch free draining crushed rock ³ overlying 18 inches of granular structural fill or chemically treated native soil. Subgrade compacted to the recommendations in Earthwork
Estimated Modulus of Subgrade Reaction²	125 pounds per square inch per inch (psi/in) for point loads

1. Floor slabs should be structurally independent of building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.
2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.
3. Free-draining granular material should have less than 5% fines (material passing the No. 200 sieve). Other design considerations such as cold

Item	Description
	temperatures and condensation development could warrant more extensive design provisions.

It is common to reduce the k-value to account for dimensional effects of large, loaded areas. For such features, the value of K_c in the following formula is the corrected or design modulus value in units of psi/in, k is the value provided in the previous table, and b is the mat width (short dimension) or tributary loaded area measured in units of feet. Soft or unstable subgrade will be remediated by scarifying and re-compacting or by over-excavation and replacement. For clay subgrades, this can be estimated as:

$$K_c = k\left(\frac{1}{b}\right)$$

Terracon can provide refined estimates of K_c if provided more detailed information regarding the loads and application area to conduct settlement analysis.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, when the project includes humidity-controlled areas, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut contraction joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations, refer to the ACI Design Manual. Joints or cracks should be sealed with a waterproof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing, or other means.

Floor Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed, and structural fill should be added to replace the resulting excavation. Final conditioning

of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should observe the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

Exterior Hardscape

In order to help protect the exterior hardscape against the swell pressure of the surficial moderately plastic clays, we recommend the subgrade soil below hardscapes either be over-excavated to a minimum depth of 18 inches and replaced with compacted granular structural fill per the recommendations provided in this report or be chemically treated to a depth of 18 inches.

Exterior hardscape, exterior architectural features, and utilities may experience some movement due to the volume change of the subgrade soils. To reduce the potential for damage caused by movement, we recommend:

- Slabs should be underlain by a minimum of 18 inches of compacted granular structural fill or chemically treated material as indicated. However, at the contractor's discretion, gravel may be placed between the slab and granular structural fill or chemically treated material to assist with constructability.
- Minimizing moisture increases in the subgrade soils and backfill;
- Controlling moisture-density during placement of fill;
- Using designs which allow vertical movement between the exterior features and adjoining structural elements;
- Placing effective control joints on relatively close centers.
- Ensuring clay subgrade soils are in a moist condition prior to slab construction.
- Reinforcing exterior slabs and flatwork with a minimum No. 4 bars at 12 inches on center.

General Comments

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the

absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials, or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly affect excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety and cost estimating including excavation support and dewatering requirements/design are the responsibility of others. Construction and site development have the potential to affect adjacent properties. Such impacts can include damages due to vibration, modification of groundwater/surface water flow during construction, foundation movement due to undermining or subsidence from excavation, as well as noise or air quality concerns. Evaluation of these items on nearby properties are commonly associated with contractor means and methods and are not addressed in this report. The owner and contractor should consider a preconstruction/precondition survey of surrounding development. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing. This report should not be used after 3 years without written authorization from Terracon.

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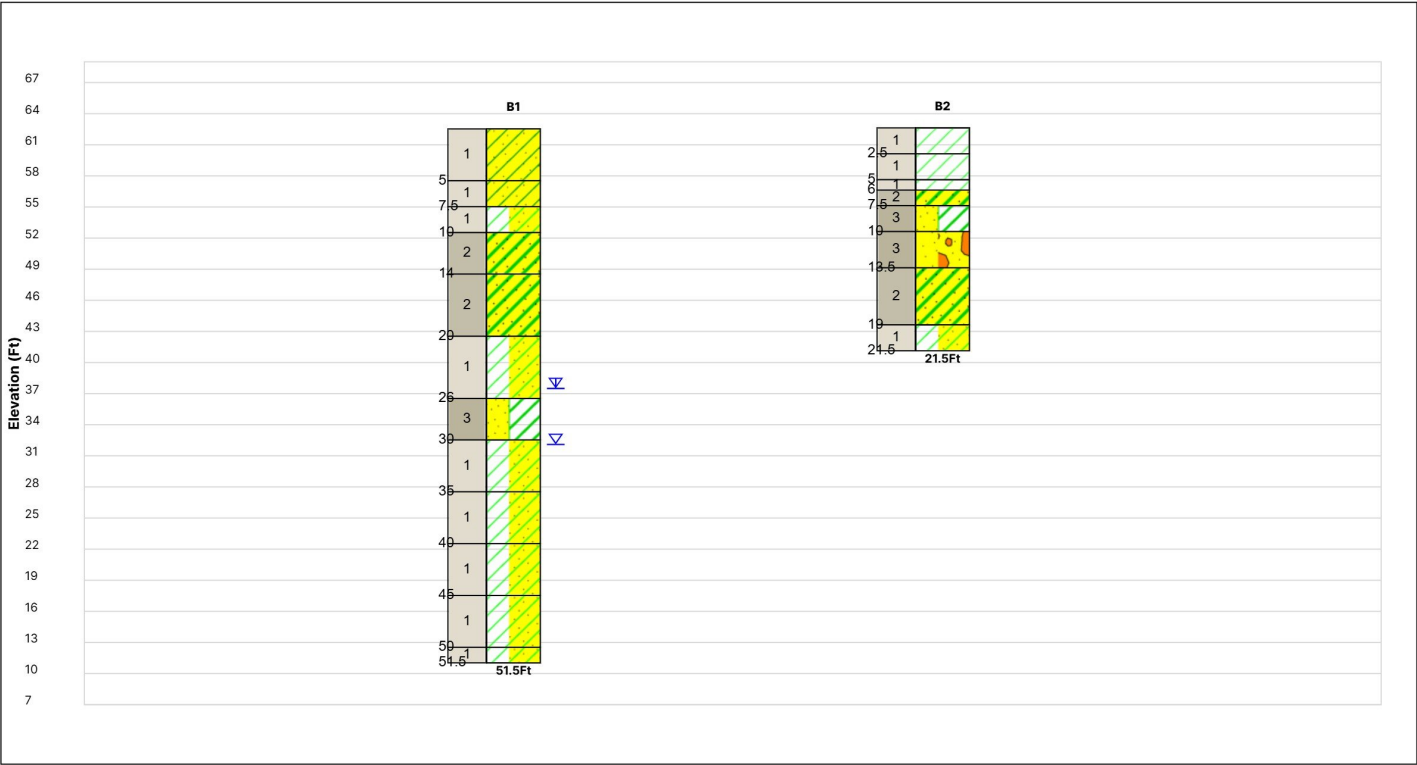
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Figures

Contents:

GeoModel
Subsurface Profile Cross Section A-A'
Subsurface Profile Cross Section B-B'
Subsurface Profile Cross Section C-C'
Geologic Map
Regional Faults
Regional Seismicity
Oil and Gas Map

GeoModel



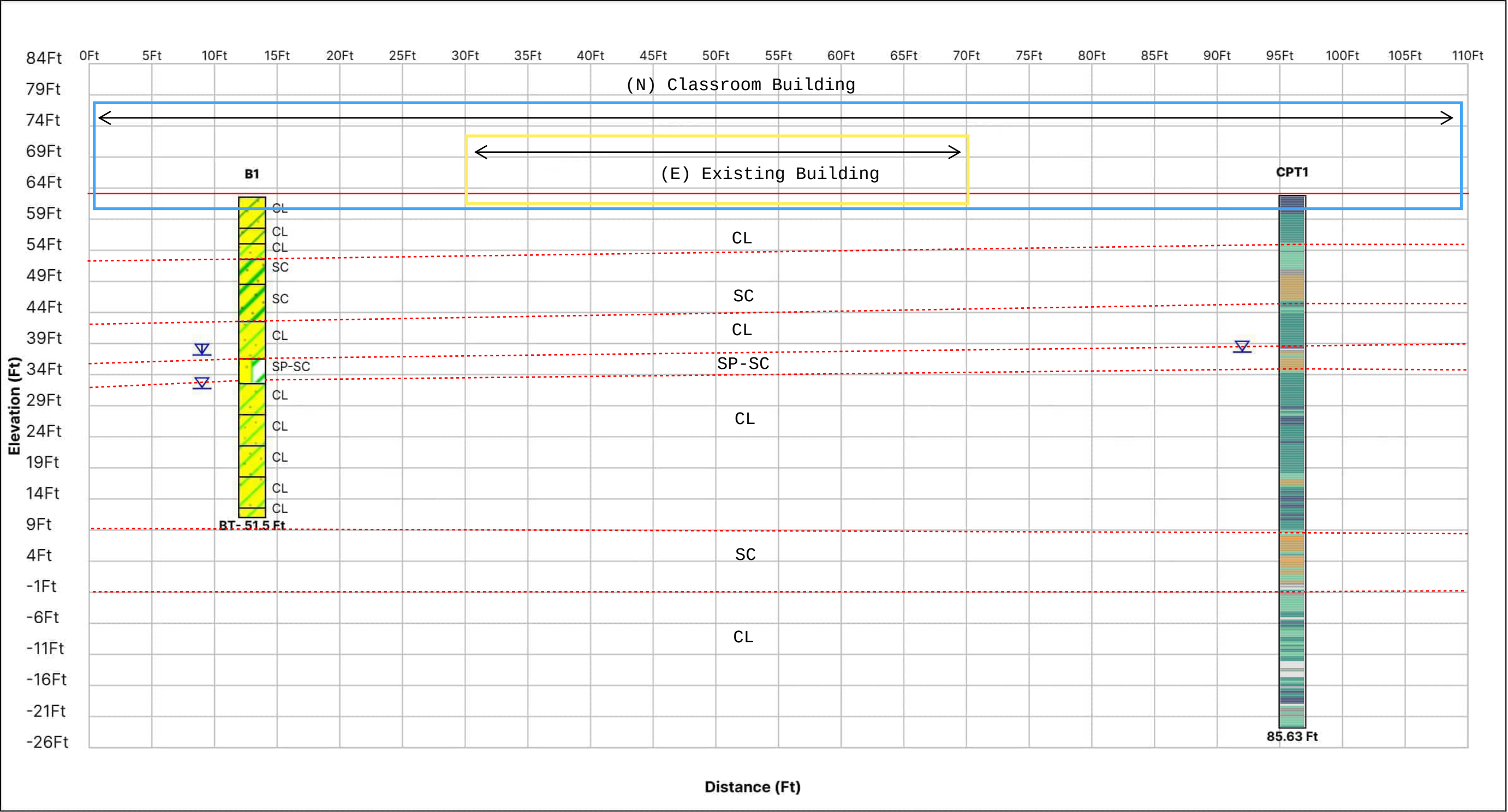
This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions

#	Layer Name	General Description
1	Lean Clay	Medium stiff to very stiff lean clay with varying amounts of sand
2	Clayey Sand	Medium dense clayey sand
3	Poorly Graded Sand	Loose to medium dense poorly graded sand with varying amounts of clay and gravel

Subsurface Profile

" Subsurface Profile A-A' "

◀ A A' ▶

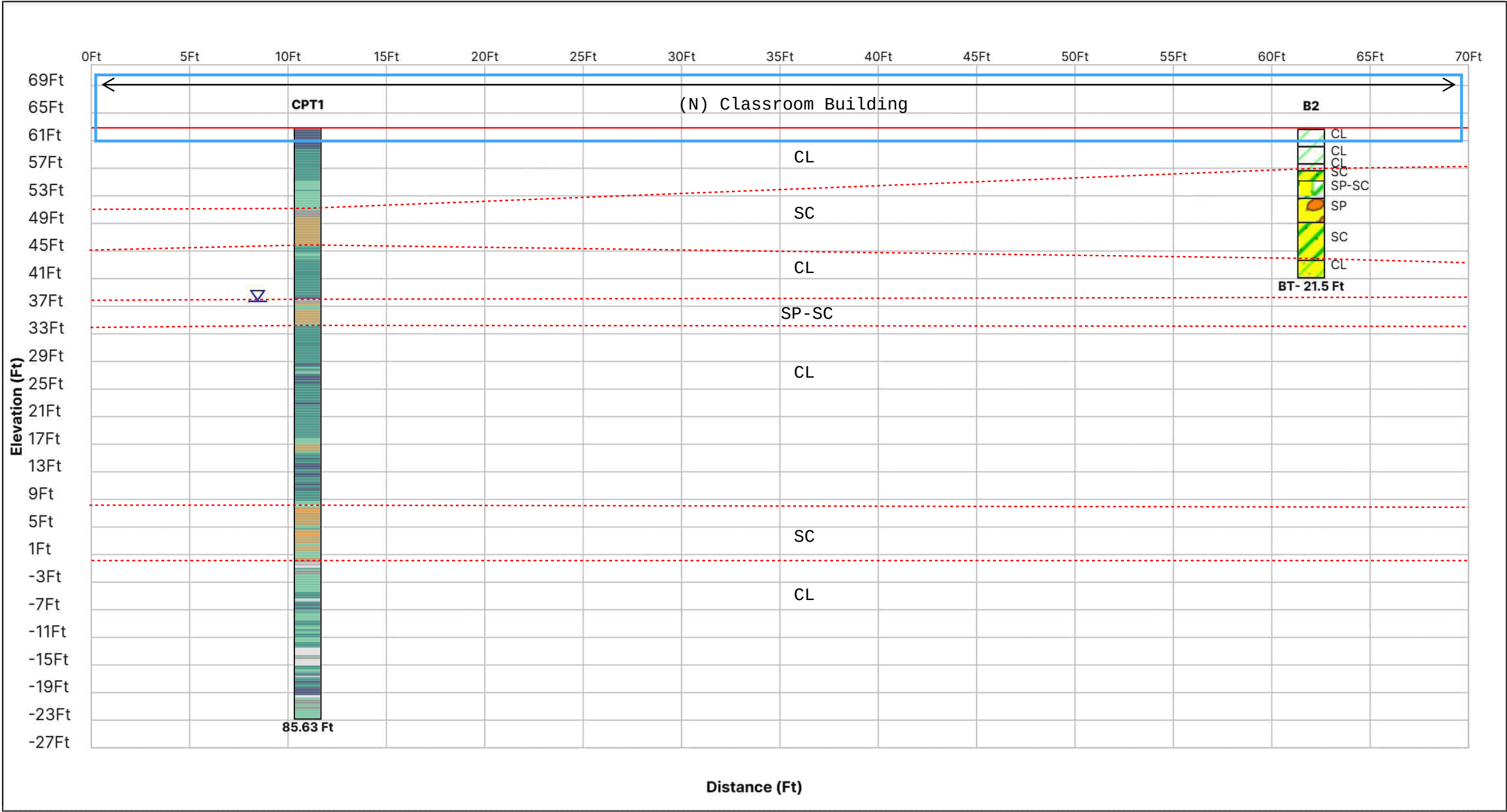


Notes	Water Level Observations	Explanation	Material Legend
See Exploration Plan for orientation of soil profile. See General Notes in Supporting Information for symbols and soil classifications. Soils profile provided for illustration purposes only. Soils between borings may differ AR - Auger Refusal BT - Boring Termination	Water Level Reading at time of drilling. Water Level Reading after drilling.	B-1 Borehole Number LL PL Liquid and Plastic Limits Borehole Lithology AR Borehole Termination Type BT	Sandy Lean Clay Lean Clay with Sand Clayey Sand Poorly Graded Sand with Clay SBT legend 1. Sensitive fine grained 2. Organic material 3. Clay to silty clay 4. Clayey silt to silty clay 5. Silty sand to sandy silt 6. Clean sand to silty sand 7. Gravely sand to sand 8. Very stiff sand to clayey sand 9. Very stiff fine grained

Subsurface Profile

" Subsurface Profile B-B' "

◀ B B' ▶

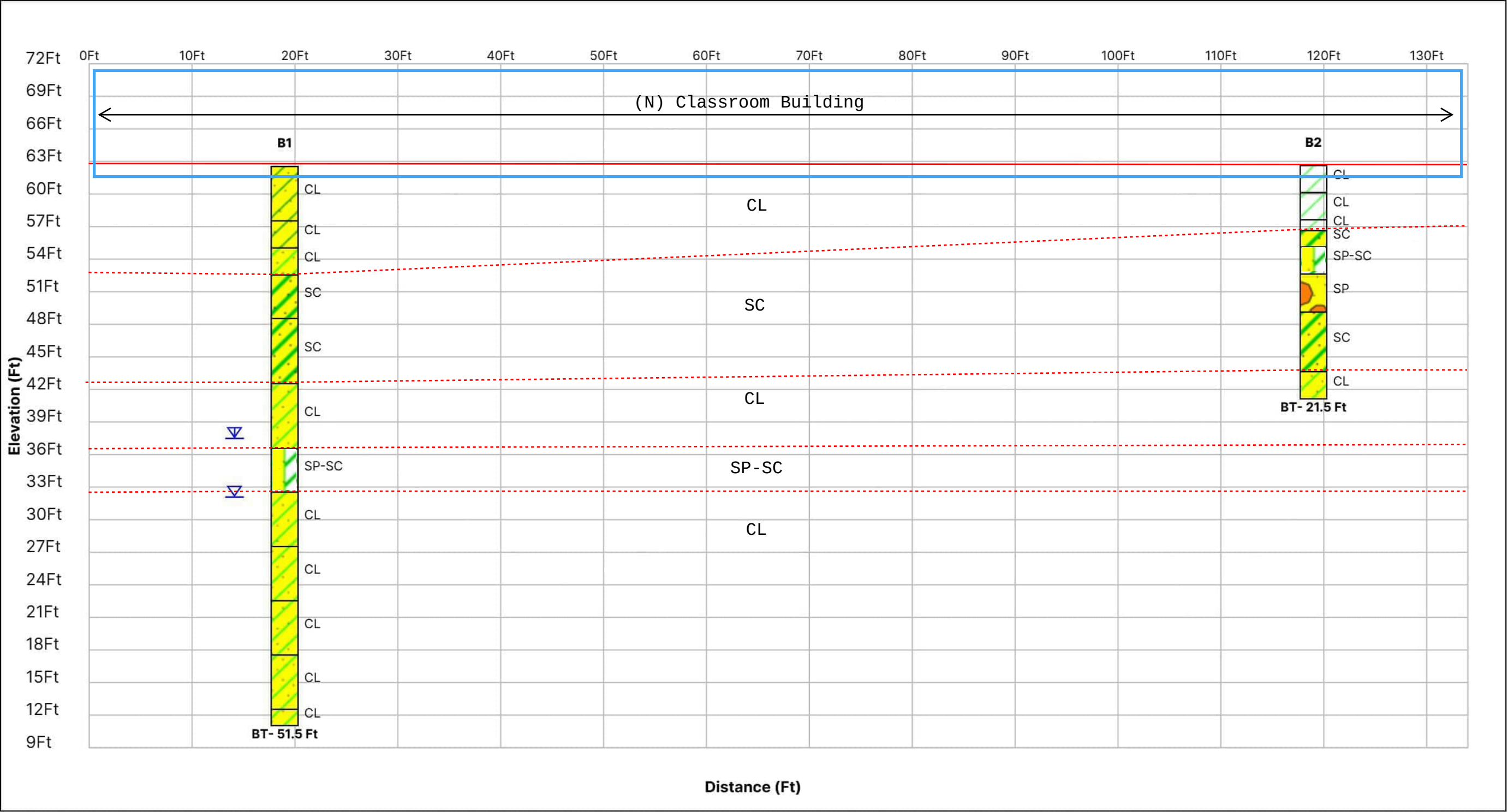


Notes	Water Level Observations	Explanation	Material Legend
See Exploration Plan for orientation of soil profile. See General Notes in Supporting Information for symbols and soil classifications. Soils profile provided for illustration purposes only. Soils between borings may differ AR - Auger Refusal BT - Boring Termination	Water Level Reading at time of drilling. Water Level Reading after drilling.	Moisture Content — %w Sampling (See General Notes) B-1 Borehole Number LL PL Liquid and Plastic Limits AR Borehole BT Borehole Termination Type	Lean Clay Poorly Graded Sand with Gravel Poorly Graded Sand with Clay Clayey Sand Lean Clay with Sand SBT legend 1. Sensitive fine grained 2. Organic material 3. Clay to silty clay 4. Clayey silt to silty clay 5. Silty sand to sandy silt 6. Clean sand to silty sand 7. Gravely sand to sand 8. Very stiff sand to clayey sand 9. Very stiff fine grained

Subsurface Profile

" Subsurface Profile C-C' "

← C C' →



Notes	Water Level Observations	Explanation	Material Legend
See Exploration Plan for orientation of soil profile. See General Notes in Supporting Information for symbols and soil classifications. Soils profile provided for illustration purposes only. Soils between borings may differ AR - Auger Refusal BT - Boring Termination	▽ Water Level Reading at time of drilling. ▽ Water Level Reading after drilling.	Moisture — %w Content Sampling — (See General Notes) B-1 — Borehole Number LL PL — Liquid and Plastic Limits — Borehole Lithology AR — Borehole Termination Type BT	Sandy Lean Clay Poorly Graded Sand with Clay Lean Clay with Sand Lean Clay Clayey Sand Poorly Graded Sand with Gravel

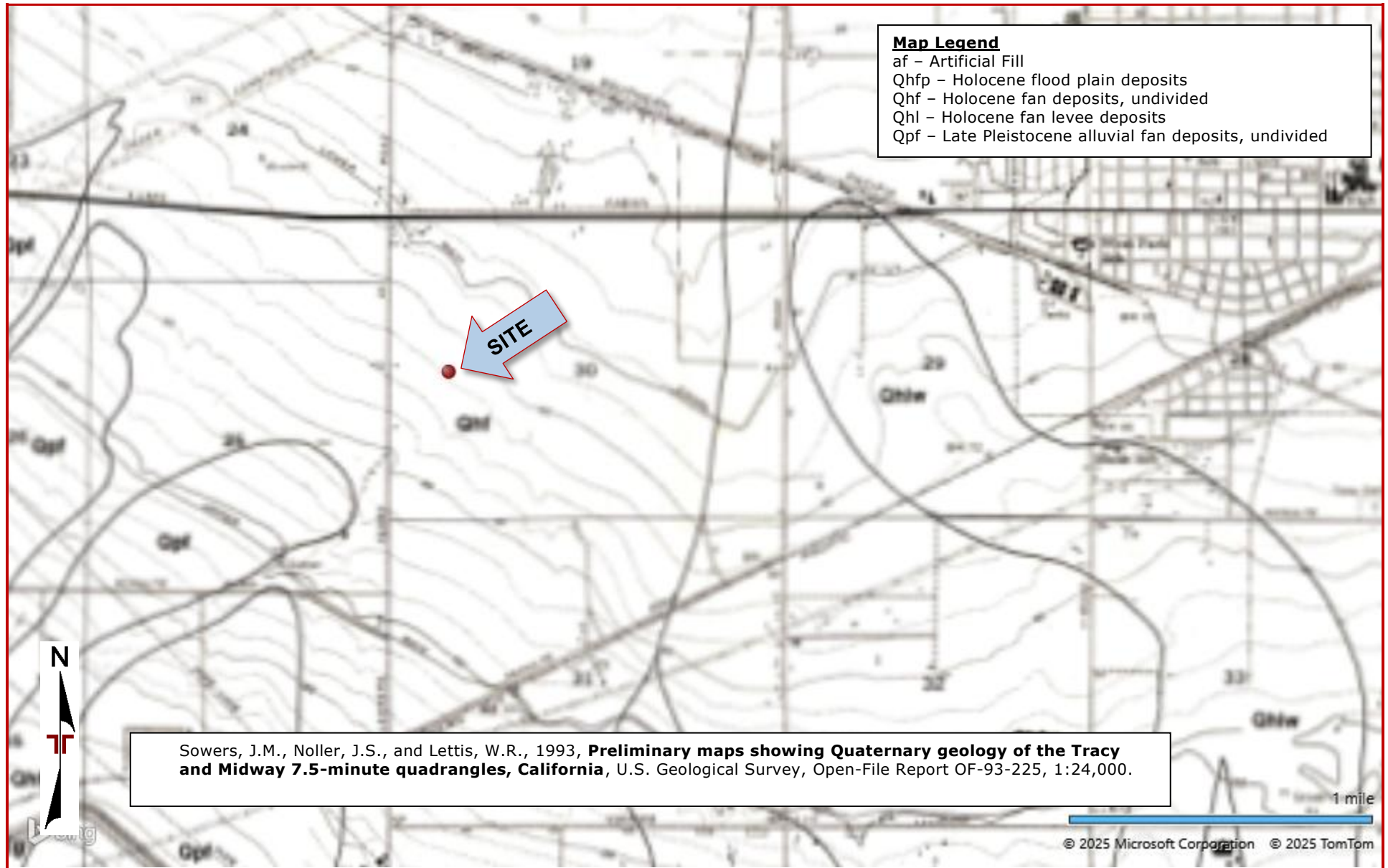
Geotechnical Engineering and Geologic Hazard Report

Kimball High School Two-Story Classroom Building | Tracy, San Joaquin County, California

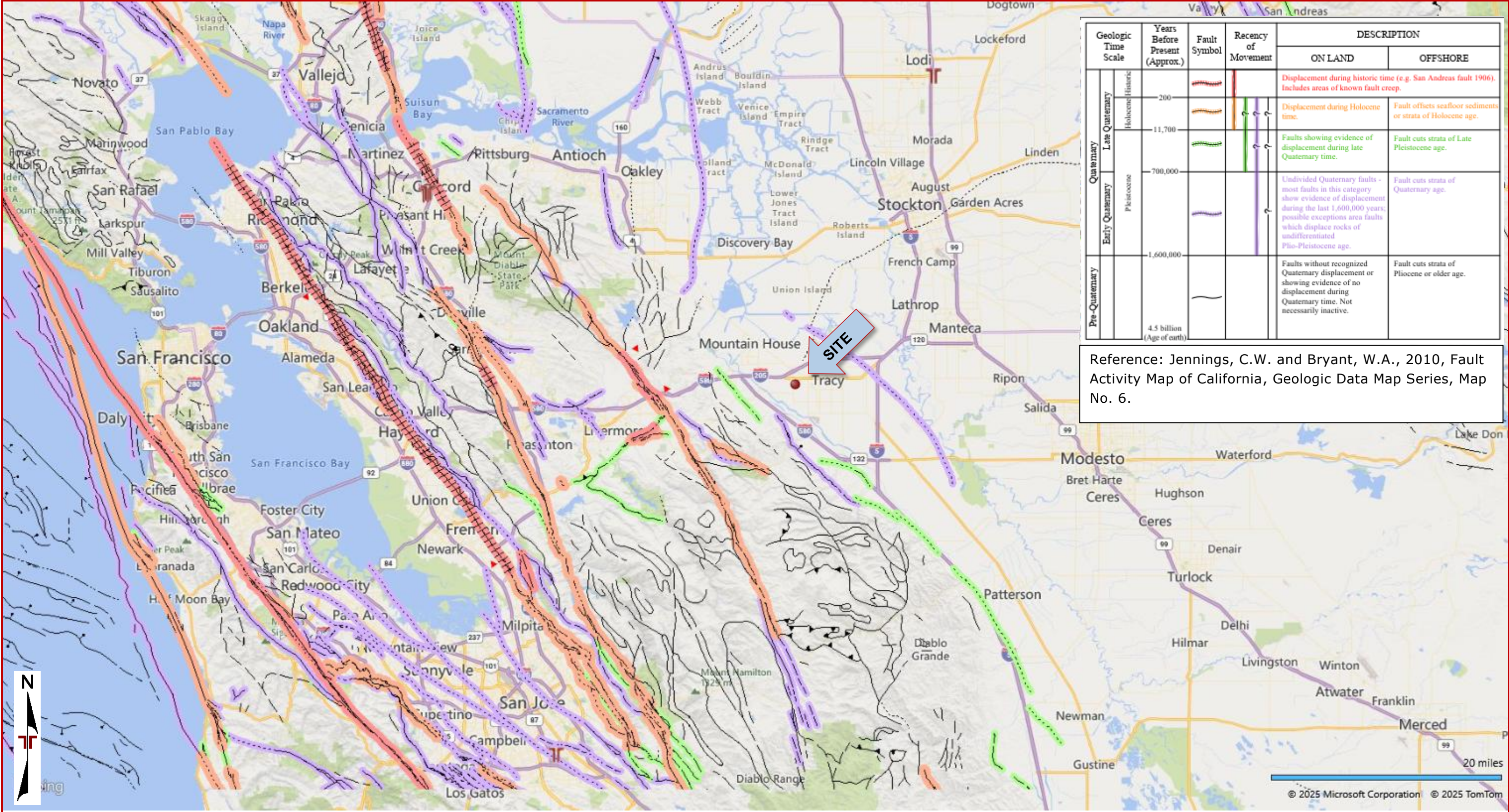
June 19, 2026 | Terracon Project No. NA255078



Regional Geologic Map



Regional Fault Map



Geotechnical Engineering and Geologic Hazard Report

Kimball High School Two-Story Classroom Building | Tracy, San Joaquin County, California
June 19, 2026 | Terracon Project No. NA255078



Regional Seismicity Map



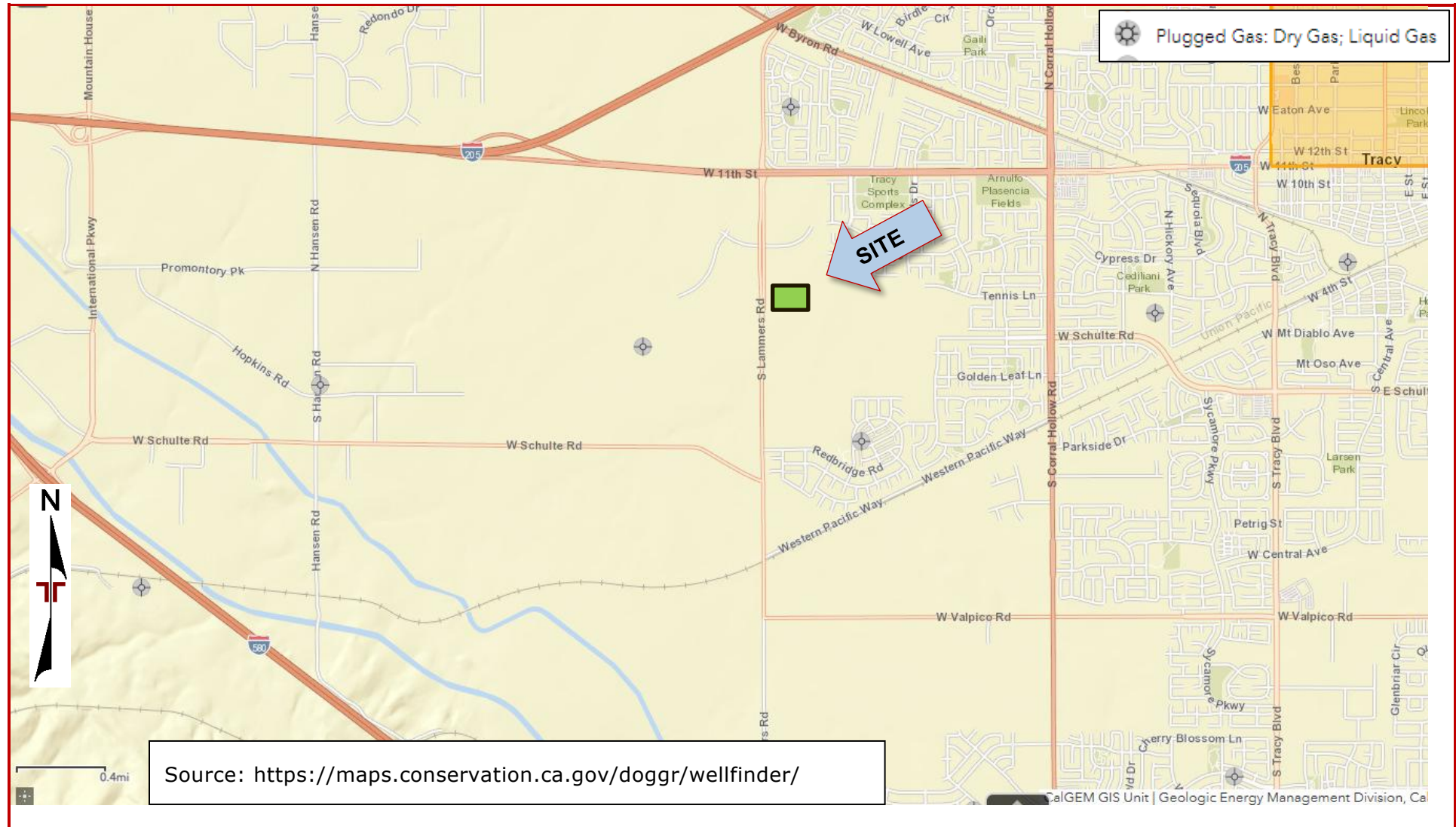
Geotechnical Engineering and Geologic Hazard Report

Kimball High School Two-Story Classroom Building | Tracy, San Joaquin County, California

June 19, 2026 | Terracon Project No. NA255078



Oil and Gas Map



Geotechnical Engineering and Geologic Hazard Report

Kimball High School Two-Story Classroom Building | Tracy, San Joaquin County, California

June 19, 2026 | Terracon Project No. NA255078



Attachments

Exploration and Testing Procedures

Field Exploration

Number of Borings/CPTs	Approximate Boring/CPT Depth (feet)	Location
1	21½ and 51½	Proposed Building Area
1 CPT	85½	Proposed Building Area

Boring Layout and Elevations: Terracon personnel provided the boring/CPT layout using handheld GPS equipment (estimated horizontal accuracy of about ±10 feet) and referencing existing site features. Approximate ground surface elevations were estimated using Google Earth. If elevations and a more precise boring and CPT layout are desired, we recommend the exploration locations be surveyed.

Subsurface Exploration Procedures: We advanced the borings with a truck-mounted rotary drill rig using continuous flight hollow stem augers. Four samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. A 3-inch O.D. split-barrel sampling spoon with 2.5-inch I.D. tube lined sampler was also used for sampling. Tube-lined, split-barrel sampling procedures are similar to standard split spoon sampling procedure; however, blow counts are typically recorded for 6-inch intervals for a total of 18 inches of penetration. We observed and recorded groundwater levels during drilling and sampling. For safety purposes, all borings were backfilled with cement grout after their completion.

We also observed the boreholes while drilling and at the completion of drilling for the presence of groundwater. The groundwater levels are shown on the attached boring and CPT logs.

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials observed during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's

interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

For the cone penetrometer testing, the CPT rig hydraulically pushed an instrumented cone through the soil while nearly continuous readings were recorded to a portable computer. The cone was equipped with electronic load cells to measure tip resistance and sleeve resistance and a pressure transducer to measure the generated ambient pore pressure. The face of the cone has an apex angle of 60° and an area of 15 cm². Digital Data representing the tip resistance, friction resistance, pore water pressure, and probe inclination angle were recorded about every 2 centimeters while advancing through the ground at a rate between 1½ and 2½ centimeters per second. These measurements were correlated to various soil properties used for geotechnical design. In addition, seismic shear-wave velocities were measured every 1.5 to 3 meters (5 to 10 feet) of probe advancement in CPT-01. No soil samples were gathered through this subsurface investigation technique. CPT testing was conducted in general accordance with ASTM D5778 "Standard Test Method for Performing Electronic Friction Cone and Piezocone Penetration Testing of Soils."

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests. The laboratory testing program included the following types of tests:

- Moisture Content
- Dry Unit Weight
- Unconfined Compression
- Atterberg Limits
- No. 200 Wash
- Expansion Index of Soils
- Corrosivity

The laboratory testing program often included examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we described and classified the soil samples in accordance with the Unified Soil Classification System.

Site Location and Exploration Plans

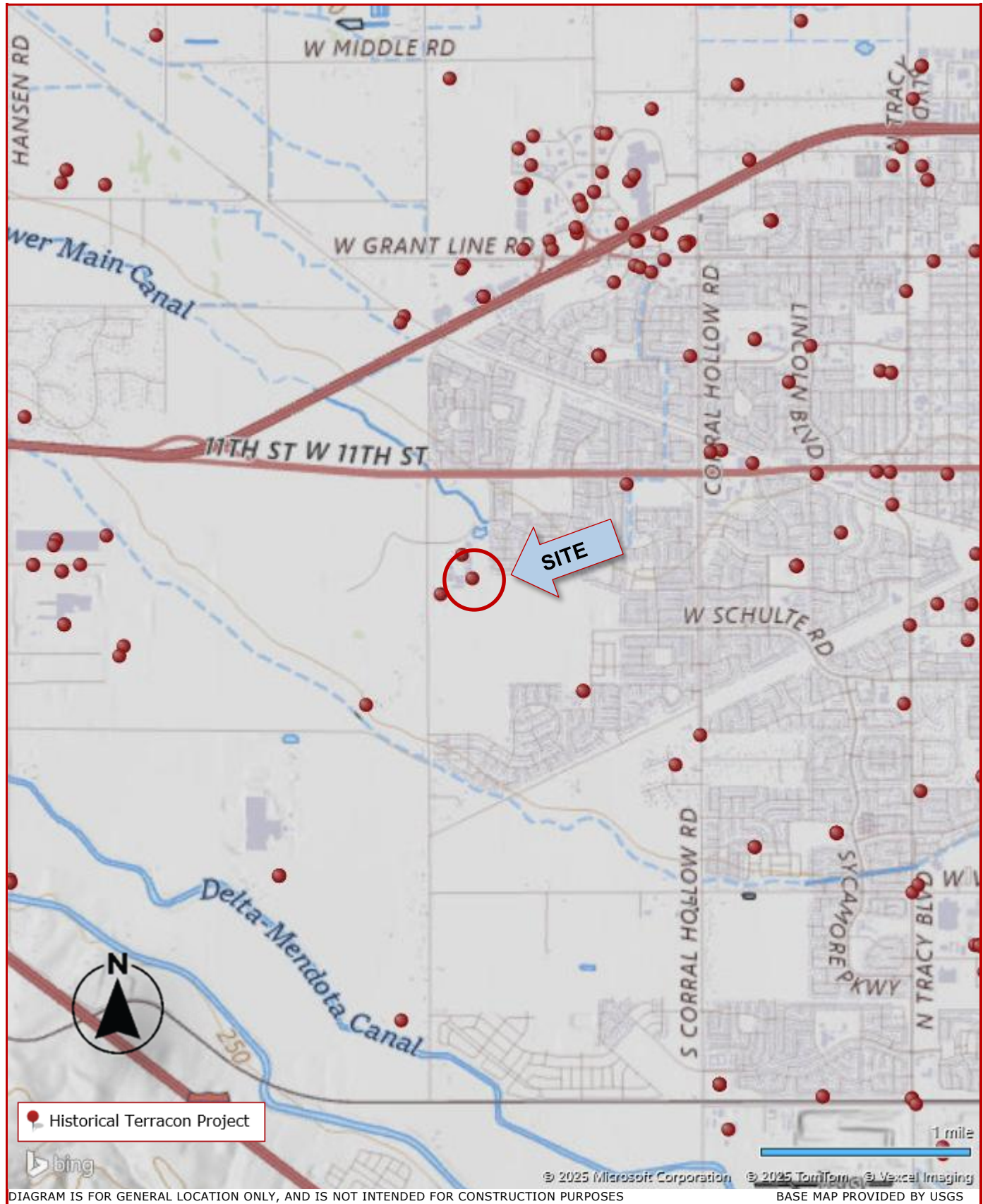
Contents:

Site Location Plan

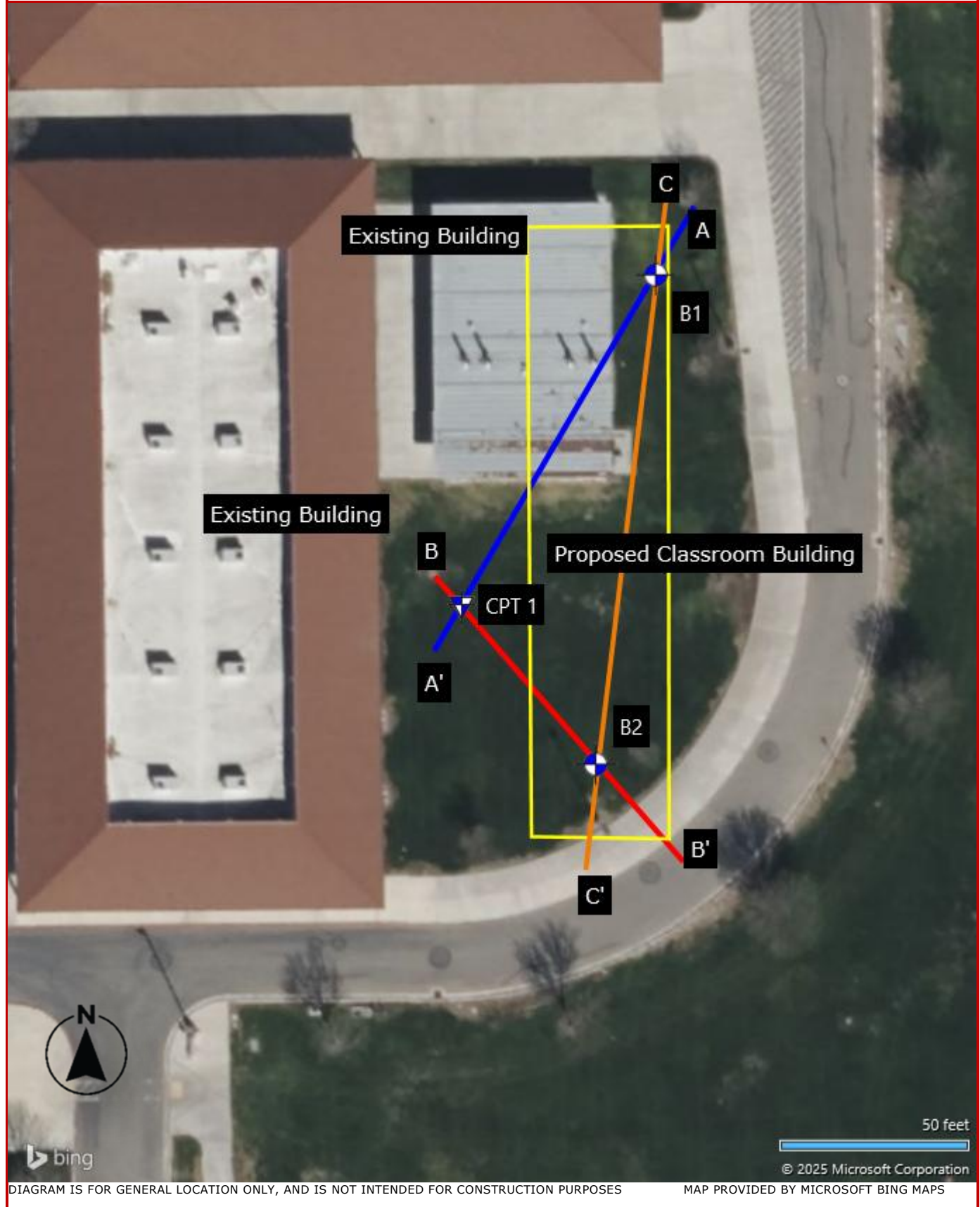
Exploration Plan

Note: All attachments are one page unless otherwise noted.

Site Location Plan



Exploration Plan



Exploration and Laboratory Results

Contents:

Boring Logs (B1 and B2)
CPT Logs (CPT-01)
Shear Wave Velocity
Atterberg Limits (2 pages)
Unconfined Compressive Strength
Corrosivity

Note: All attachments are one page unless otherwise noted.

BORING LOG NO. B1

Surface Elevation:
62.53(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Water Level Observations	Field Test Results	Hand Penetrometer (tsf)	Water Content (%)	Percent Fines	Atterberg Limits		
												LL	PL	PI
1		5.0	SANDY LEAN CLAY (CL) , dark brown, medium stiff	5	57.5			1-3-3	2.25	24.1	76.7	46	18	28
								2-3-3		23.6				
								1-2-3		18.0				
								2-3-4		20.6				
								6-11-11		11.2				
2		14.0	CLAYEY SAND (SC) , fine grained sand, brown, medium dense	15	48.5			10-11-9		19.5	17.1			
								6-9-12		23.2				
								6-7-14		11.1				
1		20.0	LEAN CLAY WITH SAND (CL) , fine grained sand, light brown, very stiff	20	42.5									
3		26.0	POORLY GRADED SAND WITH CLAY (SP-SC) , fine to medium grained sand, brown, medium dense	25	36.5									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Notes
Elevation Reference: Elevation estimated using Google Earth

Water Level Observations

30 Ft. While Drilling
 24.6 Ft. After Drilling

Advancement Method
0-51.5 Ft. 6" Hollow Stem Auger

Abandonment Method
Boring backfilled with cement grout upon completion.

Drill Rig
1057/CME-75

Hammer Type
Automatic

Driller
Terracon

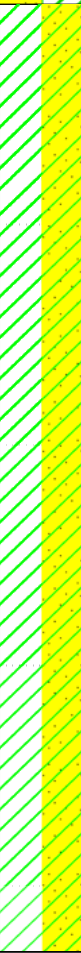
Logged By
I. King

Boring Started
11/04/2025

Boring Completed
11/04/2025

BORING LOG NO. B1

Surface Elevation:
62.53(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Water Level Observations	Field Test Results	Hand Penetrometer (tsf)	Water Content (%)	Percent Fines	Atterberg Limits		
												LL	PL	PI
3		30.0	POORLY GRADED SAND WITH CLAY (SP-SC) , fine to medium grained sand, brown, medium dense (continued)	30	32.5									
1			LEAN CLAY WITH SAND (CL) , light brown, stiff					4-6-9		22.5				
		35.0	medium stiff	35	27.5			2-2-4		27.6	93.5	36	21	15
		40.0	brown to yellowish brown, very stiff	40	22.5			7-11-11		22.5				
		45.0	light yellowish brown, stiff	45	17.5			3-5-6		26.0				
		50.0	very stiff	50	12.5			6-10-14		28.8				
			Boring Terminated at 51.5 Ft											

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Notes

Elevation Reference: Elevation estimated using Google Earth

Water Level Observations

 30 Ft. While Drilling
 24.6 Ft. After Drilling

Advancement Method

0-51.5 Ft. 6" Hollow Stem Auger

Abandonment Method

Boring backfilled with cement grout upon completion.

Drill Rig

1057/CME-75

Hammer Type

Automatic

Driller

Terracon

Logged By

I. King

Boring Started

11/04/2025

Boring Completed

11/04/2025

BORING LOG NO. B2

Surface Elevation:
62.63(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Field Test Results	Hand Penetrometer (tsf)	Strength Test		Water Content (%)	Dry Unit Weight (pcf.)	Percent Fines
									Compressive Strength (tsf)	Strain (%)			
1		2.5	LEAN CLAY (CL) , brown, stiff	5	60.1		2-5-8	1.0	1.13	3.5	25.3	98.2	
			dark brown, expansion index of soils of 107				5-7-5				30.4	93.6	
			very stiff				8-14-15				11.5	116.1	
2		7.5	CLAYEY SAND (SC) , fine to medium grained sand, brown, medium dense	10	55.1		3-7-9				16.9	100.1	5.1
3		10.0	POORLY GRADED SAND WITH CLAY (SP-SC) , fine to medium grained sand, brown, loose				9-17-13				6.5	108.5	
			POORLY GRADED SAND WITH GRAVEL (SP) , fine to coarse grained sand, fine grained gravel, brown, medium dense, gravel up to 3/4 inch										
2		13.5	CLAYEY SAND (SC) , fine to medium grained sand, brown, medium dense	15	49.1		4-11-14				13.0	94.6	
1		19.0	LEAN CLAY WITH SAND (CL) , fine grained sand, gray to brown, very stiff	20	43.6		6-14-18	4.5			23.4	103.9	
			Boring Terminated at 21.5 Ft										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
See Supporting Information for explanation of symbols and abbreviations.

Notes

Elevation Reference: Elevation estimated using Google Earth

Water Level Observations

Groundwater not encountered

Advancement Method

0-21.5 Ft. 6" Hollow Stem Auger

Abandonment Method

Boring backfilled with cement grout upon completion.

Drill Rig

1057/CME-75

Driller

Terracon

Logged By

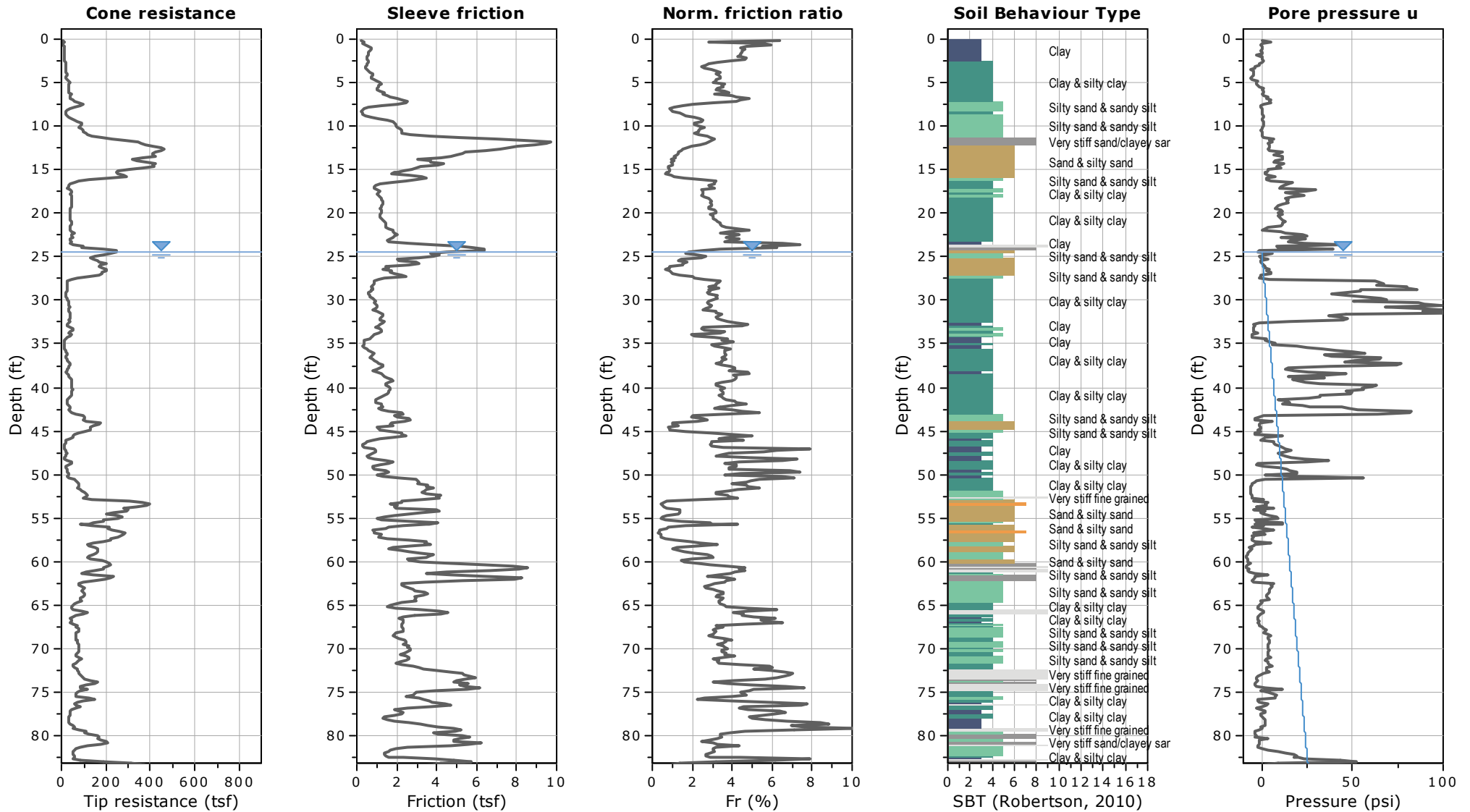
I. King

Boring Started

11/04/2025

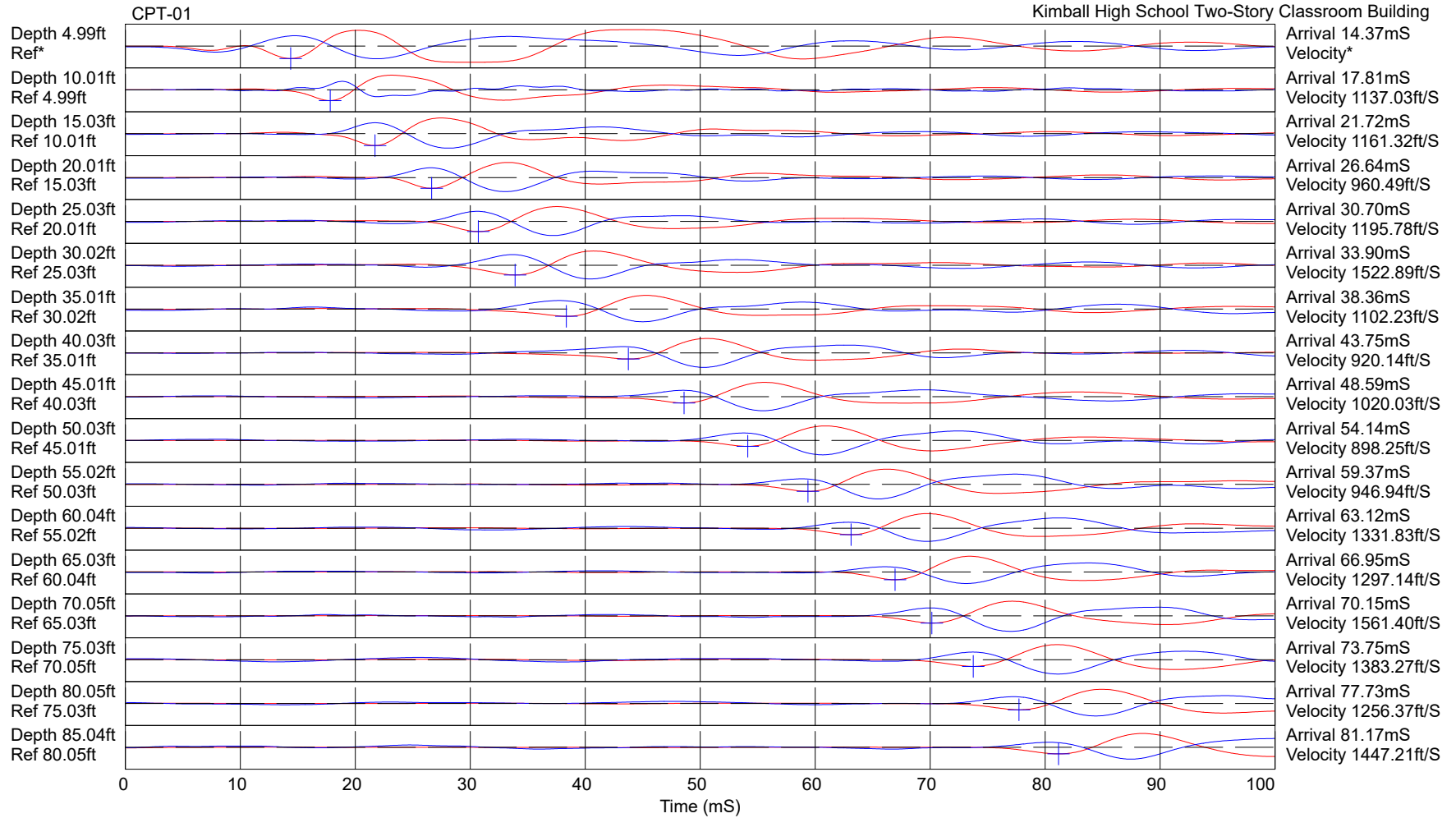
Boring Completed

11/04/2025

Project: Kimball High School Two-Story Classroom Building
Location: Tracy, CA




Shear Wave Velocity



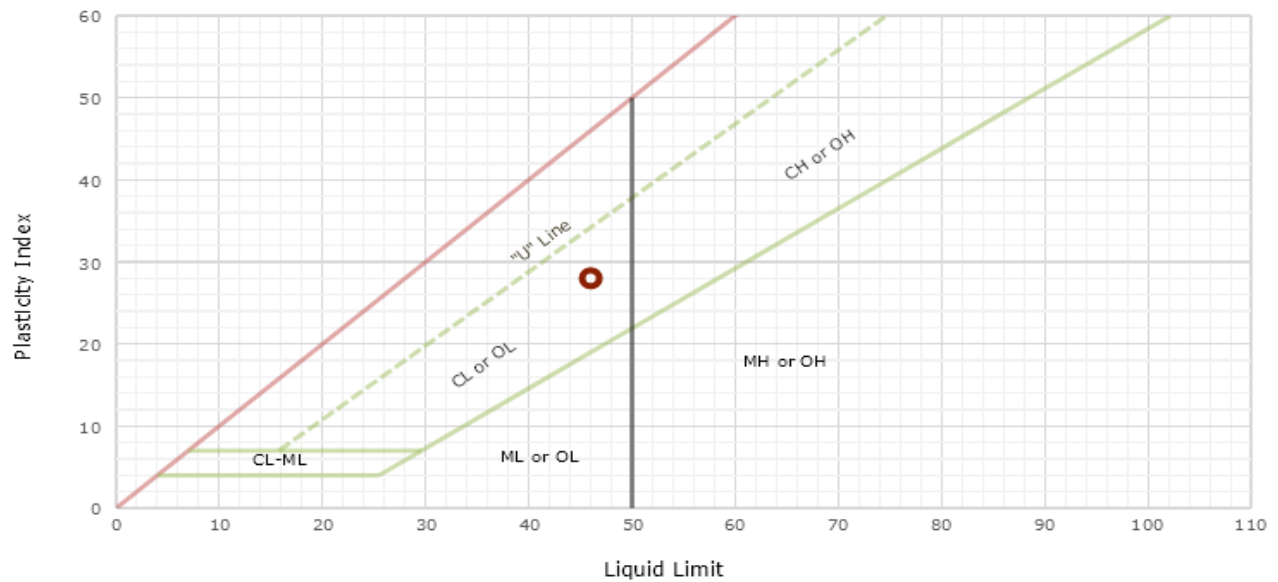
Hammer to Rod String Distance (ft): 5.83

* = Not Determined

COMMENT:

Liquid Limit, Plastic Limit and Plasticity Index of Soils

ASTM D4318

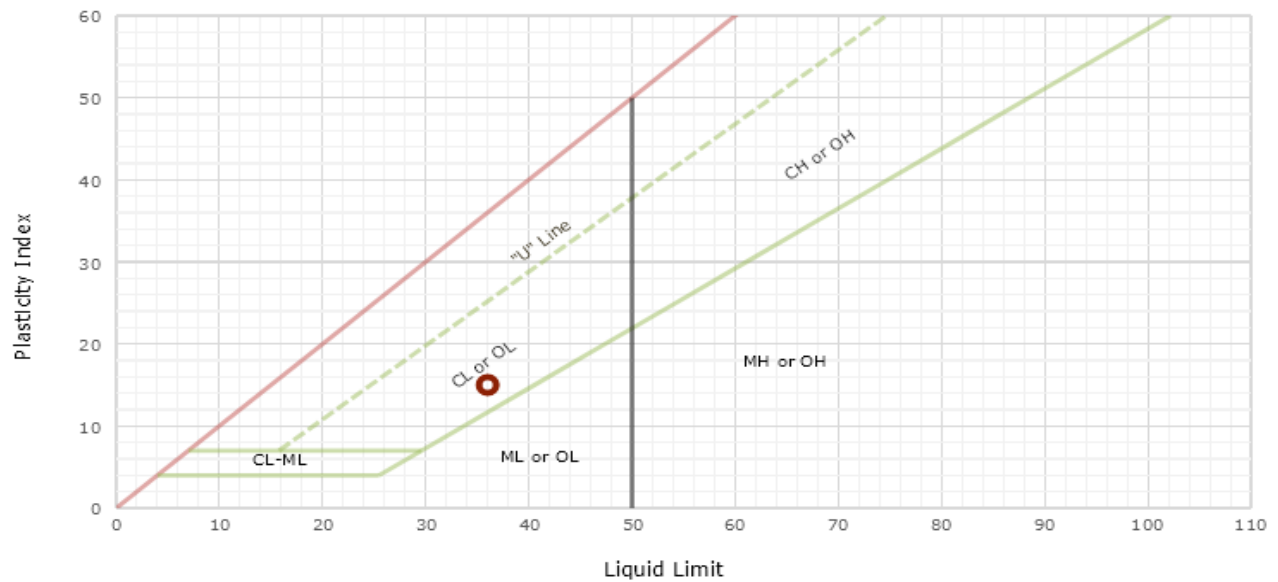


Boring ID	Depth (Ft)	LL	PL	PI	Fines (%)	Description	USCS
B1	2.5-4	46	18	28	77	Lean Clay	CL

Remarks

Liquid Limit, Plastic Limit and Plasticity Index of Soils

ASTM D4318

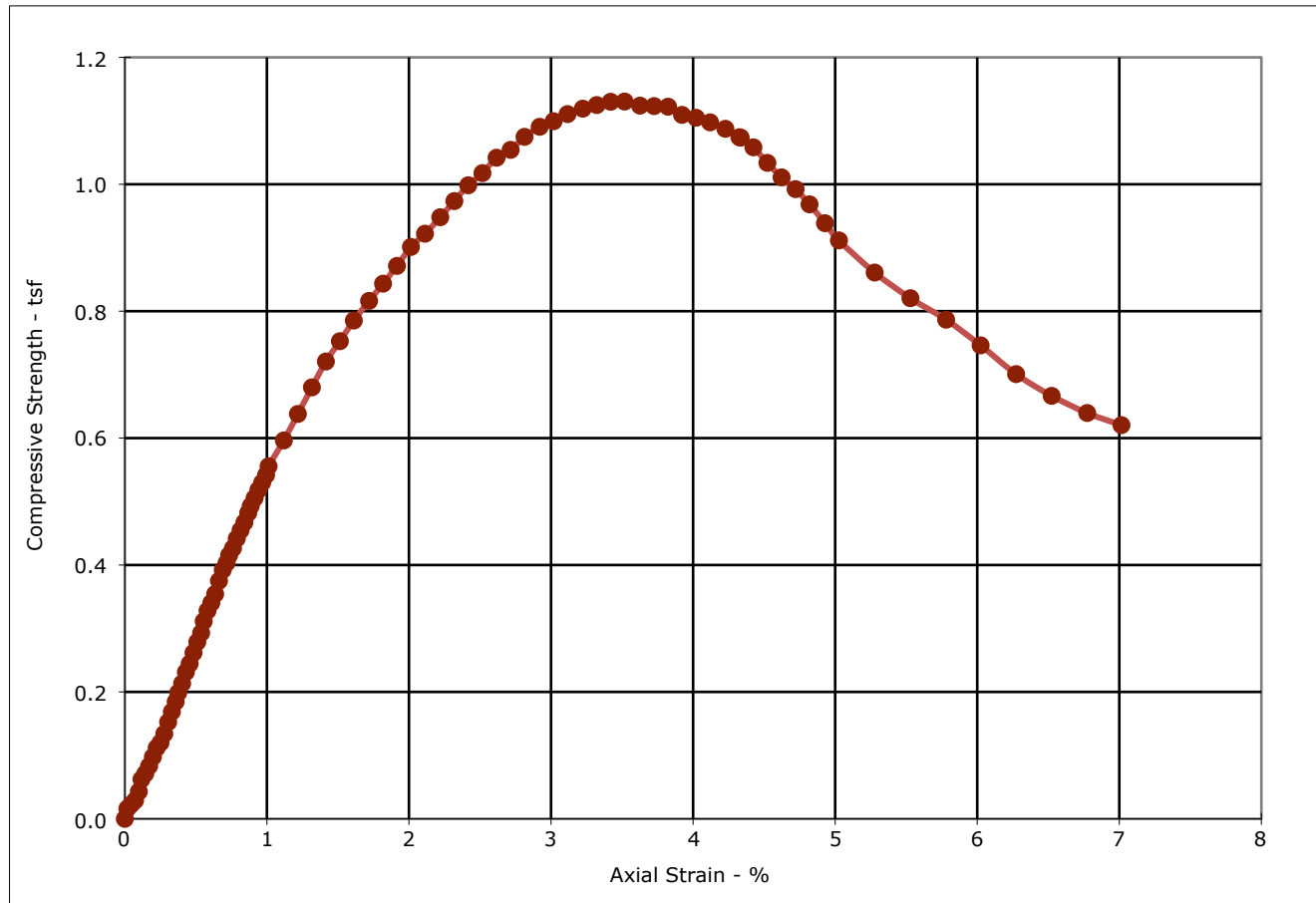


Boring ID	Depth (Ft)	LL	PL	PI	Fines (%)	Description	USCS
B1	35-36.5	36	21	15	94	Lean Clay	CL

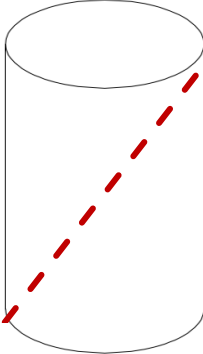
Remarks

Unconfined Compressive Strength of Cohesive Soil

ASTM D2166



Boring ID	Depth (Ft)	Sample Type	LL	PL	PI	USCS	Fines (%)	Description
B2	2.5 - 4	Intact				CL		Lean Clay

Specimen Failure Mode	Specimen Test Data
	Water Content (%): 30.4
	Dry Density (pcf): 93.6
	Diameter (in.): 2.38
	Height (in.): 4.84
	Height / Diameter Ratio: 2.03
	Calculated Saturation (%): 102.7
	Calculated Void Ratio: 0.80
	Assumed Specific Gravity: 2.7
	Failure Strain (%): 3.5
	Unconfined Compressive Strength (tsf): 1.13
	Undrained Shear Strength (tsf): 0.57
	Strain Rate (%/min): 1.0
	Remarks: .

Kimball High School Two-Story Classroom Building

3200 Jaguar Run | Tracy, CA 95377

Terracon Project No. NA255078

902 Industrial Way
Lodi, CA 95240-3106**Soil Corrosivity Profile
Summary Report**

Boring ID	B1
Sample Depth, (ft)	5
Sample Description	Lean Clay

Test Method	Test Designation	Test Result
Electrical Resistivity ($\Omega \cdot \text{cm}$)	ASTM G57	540
Oxidation Reduction Potential (RmV)	ASTM G200	129
Acidity (pH)	AASHTO T289	7.6
Chloride Ion Content (mg/kg)	AWWA -4500-CL-B	1
Soluble Sulfate Content (mg/kg)	ASTM D516	642
Total Dissolved Salts (mg/kg)	AWWA 2520 B	1315
Sulfides (mg/kg)	AWWA 4500-S2- D	0

Instrument Identifications			
Oxidation Reduction Potential		Acidity (pH)	
Probe ID	Oakton Testr 50	Meter ID	Oakton pH Testr 30
Meter ID	Oakton Testr 50	Thermometric Type	Digital
Thermometric Type	Digital		

Supporting Information

Contents:

General Notes

Unified Soil Classification System

Note: All attachments are one page unless otherwise noted.

General Notes

Sampling	Water Level	Field Tests
 Auger Cuttings  Modified California Ring Sampler  Rock Core	 Water Initially Encountered  Water Level After a Specified Period of Time  Water Level After a Specified Period of Time  Cave In Encountered	N Standard Penetration Test Resistance (Blows/Ft.) (HP) Hand Penetrometer (T) Torvane (DCP) Dynamic Cone Penetrometer UC Unconfined Compressive Strength (PID) Photo-Ionization Detector (OVA) Organic Vapor Analyzer
 Dynamic Cone Penetrometer  Modified Dames & Moore Ring Sampler  Dual Sampler SPT	Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	
 Grab Sample  GeoProbe Macro Core or Large Bore  No Recovery		
 Ring Sampler  Shelby Tube  Standard Penetration Test		
 Split Spoon  Texas Cone Penetrometer  Vane Shear		

Descriptive Soil Classification

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

Location And Elevation Notes

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

Strength Terms

Relative Density of Coarse-Grained Soils (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance			Consistency of Fine-Grained Soils (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			
Relative Density	Standard Penetration or N-Value (Blows/Ft.)	Ring Sampler (Blows/Ft.)	Consistency	Unconfined Compressive Strength Qu (tsf)	Standard Penetration or N-Value (Blows/Ft.)	Ring Sampler (Blows/Ft.)
Very Loose	0 - 3	0 - 6	Very Soft	less than 0.25	0 - 1	< 3
Loose	4 - 9	7 - 18	Soft	0.25 to 0.50	2 - 4	3 - 4
Medium Dense	10 - 29	19 - 58	Medium Stiff	0.50 to 1.00	4 - 8	5 - 9
Dense	30 - 50	59 - 98	Stiff	1.00 to 2.00	8 - 15	10 - 18
Very Dense	> 50	> 99	Very Stiff	2.00 to 4.00	15 - 30	19 - 42
			Hard	> 4.00	> 30	> 42

Relevance of Exploration and Laboratory Test Results

Exploration/field results and/or laboratory test data contained within this document are intended for application to the project as described in this document. Use of such exploration/field results and/or laboratory test data should not be used independently of this document.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification	
				Group Symbol	Group Name ^B
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels: Less than 5% fines ^C	$Cu \geq 4$ and $1 \leq Cc \leq 3$ ^E	GW	Well-graded gravel ^F
		Gravels with Fines: More than 12% fines ^C	$Cu < 4$ and/or $[Cc < 1 \text{ or } Cc > 3.0]$ ^E	GP	Poorly graded gravel ^F
			Fines classify as ML or MH	GM	Silty gravel ^{F, G, H}
			Fines classify as CL or CH	GC	Clayey gravel ^{F, G, H}
	Sands: 50% or more of coarse fraction passes No. 4 sieve	Clean Sands: Less than 5% fines ^D	$Cu \geq 6$ and $1 \leq Cc \leq 3$ ^E	SW	Well-graded sand ^I
		Sands with Fines: More than 12% fines ^D	$Cu < 6$ and/or $[Cc < 1 \text{ or } Cc > 3.0]$ ^E	SP	Poorly graded sand ^I
			Fines classify as ML or MH	SM	Silty sand ^{G, H, I}
			Fines classify as CL or CH	SC	Clayey sand ^{G, H, I}
Fine-Grained Soils: 50% or more passes the No. 200 sieve	Silts and Clays: Liquid limit less than 50	Inorganic:	$PI > 7$ and plots above "A" line ^J	CL	Lean clay ^{K, L, M}
			$PI < 4$ or plots below "A" line ^J	ML	Silt ^{K, L, M}
	Silts and Clays: Liquid limit 50 or more	Organic:	$\frac{LL \text{ oven dried}}{LL \text{ not dried}} < 0.75$	OL	Organic clay ^{K, L, M, N} Organic silt ^{K, L, M, O}
		Inorganic:	PI plots on or above "A" line	CH	Fat clay ^{K, L, M}
			PI plots below "A" line	MH	Elastic silt ^{K, L, M}
		Organic:	$\frac{LL \text{ oven dried}}{LL \text{ not dried}} < 0.75$	OH	Organic clay ^{K, L, M, P} Organic silt ^{K, L, M, Q}
			Highly organic soils:		PT

^A Based on the material passing the 3-inch (75-mm) sieve.

^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^C Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

^D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

$$^E \quad Cu = D_{60}/D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

^F If soil contains $\geq 15\%$ sand, add "with sand" to group name.

^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^H If fines are organic, add "with organic fines" to group name.

^I If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

^L If soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.

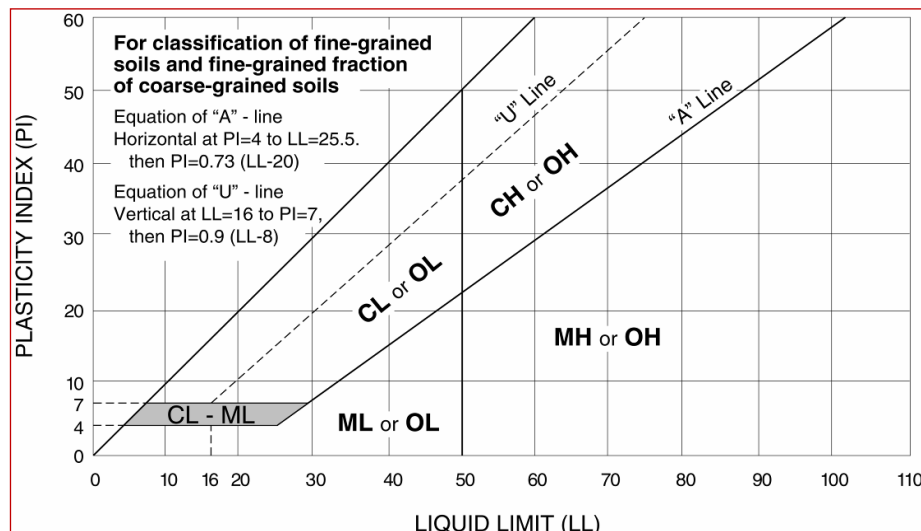
^M If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

^N $PI \geq 4$ and plots on or above "A" line.

^O $PI < 4$ or plots below "A" line.

^P PI plots on or above "A" line.

^Q PI plots below "A" line.



Tracy USD
Kimball HS 2-Story Sci Wing Project (Incr 1, Site Pkg and Incr 2, Building Pkg)
Responsibility Matrix

3/27/2026

Description	Site Contractor	Modular Contractor	Others	Comments
General				
All work within the perimeter of the modular buildings not specifically identified below.		X		
All work outside the perimeter of the modular buildings not specifically identified below.	X			
Division 1 - General Requirements:				
Storm Water Pollution Prevention Plan	X			If required
Temporary facilities:				
Temporary site fencing	X			Furnish, install, maintain, and remove at occupancy.
Portable toilets/ Hand Washing Sinks	X	X		Inc 1 and Inc 2 both responsible for facilities for their crew and will provide access to the District, IOR, Test Lab, Arch, and CM.
Field office for Inspector and CM	X			See Special Conditions (Inc 1)
Contractor's Field Office	X	X		
Temporary power service for Job Trailers	X	X		Modular contractor to connect its job trailer to temp power provided within 5 feet of the building by the site contractor.
Temporary power service for Site Activities	X	X		Modular Contractor may be required to provide portable generators during installation of Modular Buildings. Modular contractor to provide temp power boxes for their work on site. Temp power source provided within the project site area by site contractor. Site contractor responsible for its temp power.
Gas and electrical utility charges for start-up and testing.			X	By District
Temporary water	X			Assemble temp water resource (Min. 2" hookup) for construction use central to the work. Remove at project completion.
Temporary fire water			X	Ref. Site plan
Cleanup and Offhaul of debris related to your work.	X	X		
Division 3 - Concrete				
Building Concrete				

Description	Site Contractor	Modular Contractor	Others	Comments
Foundation Staking	X			Modular contractor to confirm building corners as staked and pad heights are correct. Certification of building pad by site contractor.
Dig footings and Stockpile Spoils		X		
Off-haul Footing Spoils	X			Modular contractor to coordinate with site contractor.
Slab on Grade Foundations		X		
Imbeds, hold downs, and other anchors		X		
Pipes, Conduit, or Sleeves for Utilities	X	X		Modular contractor to coordinate location of all utility stubs with site contractor (Provide Drawing with Dimensions). Site contractor to provide utilities within 5' of building. Modular contractor to connect to POC provided by the site contractor
Division 5 - Metals				
Misc.				
Handrails	X	X		Site Handrails by Inc 1, All interior and exterior hadrails for building by the Modular Contractor.
DI Grates	X			See plans
DF Rails on New Building		X		See plans
Division 9 - Painting				
All Interior building paint	X	X		Painting related to the Site by Inc 1, All interior and exterior paint for new building by the Modular Contractor.
Exterior Building Paint (New bldg only)		X		
Misc. Site Items called for Paint	X			
Building Paint (Modernization and Building Addition only)	X			
Division 10 - Specialties				
Room Signage		X		
Fire Extinguishers and cabinets		X		
Division 11 - Equipment				
Fume Hoods		X		Purchase and Install under Inc 2. Design and equipment specification by Incr 1 Architect.
Division 13 - Special Construction				
Modular Buildings				
Engineering & DSA Approval		X		Coordinate all planning work through AOR related to DSA Approval

Description	Site Contractor	Modular Contractor	Others	Comments
Manufacture Buildings		X		
Set & Connect		X		
Finish		X		
Division 21 - Fire Suppression				
Fire Service (if applicable):				
Fire Sprinkler - Site to Building POC	X			
FS riser and connection at Building POC		X		Site Contractor to bring pipe into the building and stub 12" aff, pressurize and test underground system, site Water to be available at the building, and thrust blocks coordinated and poured prior to foundation work.
Fire sprinklers including calculations for DSA approval.		X		
Fire lines and hydrants outside of building	X			See plans
Division 22 - Plumbing				
Condensate drain:				
Stub condensate drain 6" outside building face		X		See plans
Drinking fountains attached to or in Modular Bldg		X		See plans
HVAC Controls/Energy management system		X		All new building controls by the Modular Contractor (Inc 2).
Conduit and back boxes for HVAC controls.		X		All new building conduit and boxes by the Modular Contractor (Inc 2).
Provide programmable thermostat		X		All new building thermostats by the Modular Contractor (Inc 2).
Division 26 - Electrical:				
Power & Distribution:				
Transformers (outside building)	X			See plans
Distribution switch boards (outside building)	X			See plans
Power to Buildings	X			
Building Elec. Panel		X		
Connect to Building Panel including ground rod and ground rod test.	X			All appurtenance related to new building power by site contractor. All modernization power by site contractor. Load design by Modular Contractor (Inc 2).

Description	Site Contractor	Modular Contractor	Others	Comments
Lighting:				
Site Lighting	X			If applicable.
All Building Lighting	X	X		All lighting related to the modernization by Inc 1 contractor, All new building lighting by the Modular Contractor (Inc 2).
Division 27 - Communications				
STC mounted at Building		X		
Telephone Systems:				
Bldg. Conduit & Back boxes		X		
Conduit to Building	X			
Conduit from Building to STC Cabinet		X		
Telephone System			X	By Owner
Data:				
Bldg. Conduit & Back boxes		X		
Conduit to Building	X			
Data cabling	X			Including testing, labeling, and final report.
IDF Cabinet	X			See plans, Backing/ Blocking by Incr. 2 Contractor.
Power for IDF		X		Provide 1- 120V 20A Circuit
Switches, Routers, WAPs, Cameras (outdoor only)			X	
Clock/Bell/Intercom				
Bldg. Conduit & Back boxes		X		See plans
Conduit to Building	X			See plans
Cabling	X			
Equipment			X	By Owner (If applicable)
AV Systems				
Classroom Video Monitor & Mount			X	By Owner
Backing for equipment		X		
Bldg. Conduit & Back boxes		X		
Classroom AV System			X	By Owner
Power for Classroom Video Monitor		X		Provide 1- 120V 20A Circuit/ clsm
Division 28 - Electronic Safety & Security				
Fire Alarm:				
Bldg. Conduit, Back boxes, & supports for devices		X		
Conduit to Building STC Cabinet	X			

Description	Site Contractor	Modular Contractor	Others	Comments
All fire alarm control, and annunciator panels	X			
Power for FACP/ FAEP (in modular bldgs.)		X		If applicable
Terminal Cabinets	X			
Devices and Conductors	X			
FS Flow & Tamper Switches at building riser.		X		
FS Alarm Bell		X		
FS flow and tamper switches outside buildings (i.e. @ backflow devices, PIV, etc.)	X			
Conduit & Wire for FS Devices	X			
Connect FS Devices to FA	X			
Security System:				
Bldg. Conduit & Back boxes		X		
Conduit to Building STC Cabinet		X		
Security System: Equipment			X	By District's Vendor
Division 31 - Earthwork				
Earthwork				
Excavation/backfill	X			
Rough grading	X			
Finish grading	X			
Finish grade, including slopes to drain (if applicable) within the bldg pad area, and re-grading after the form work is removed.	X			
Division 32 - Exterior Improvements				
Asphalt concrete				
Driveways/parking	X			
Walkways	X			
Striping	X			
Site Concrete				
Mow Strips	X			
Site Flat Work	X			
Curb & Gutter	X			
Division 33 - Utilities				
Domestic Water:				
Water service (w/in 5' of Bldgs)	X			
SOV at Buildings	X			
Connect to Buildings	X			
Chlorination - Site Lines	X			
Chlorination - Building Lines	X			
Sanitary Sewer				
Site to POC (w/in 5' of bldg)	X			

Description	Site Contractor	Modular Contractor	Others	Comments
Clean-outs at POC	X			
Connections at Buildings	X			
Storm Drains:				
Site	X			
Under Buildings	X			
Storm Drain to RWL	X			
Connect RWL to SD	X			
Gas Service:				
Gas service to meter (trenching)	X			If applicable
Gas service to meter (Gas line)	X			If applicable
Gas meter	X			If applicable
Gas Line to Buildings/Units	X			If applicable
Housekeeping pad for gas meter (if applicable)	X			If applicable
SOV/ PRV regulator at Building/Units	X			If applicable
Connect Units to SOV	X			If applicable

END OF DOCUMENT