DOCUMENT 00 11 16

NOTICE TO BIDDERS

1. Notice is hereby given that the governing board ("Board") of the Alum Rock Union School District ("District") will receive sealed bids for the following project, Bid No. **2425-Bonds05/ Project No. 3** ("Project" or "Contract"):

L.U.C.H.A Elementary School Play Structure Sitework Project

2. The Project consists of:

   Installation of new play structure, integrated 26 diameter, 12'x12' and PC shade structure along with new ground surface and path of travel upgrades, which include removing and replacing areas of concrete walk along path of travel from accessible parking to unisex adult restrooms, boys' and girls' restrooms, drinking fountain and proposed play structure and staff gender restroom at classroom B.

3. To bid on this Project, the Bidder is required to possess one or more of the following State of California contractors' license(s)**: A, B, C-8 and/or C-12**

   The Bidder's license(s) must remain active and in good standing throughout the term of the Contract.

4. To bid on this Project, the Bidder is required to be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code.

5. Contract Documents will be available on or after **September 12, 2024**, for review by downloading them from the District's website, https://www.arusd.org/district/departments/business-services/purchasing/bids, using the link. In addition, Contract Documents are available for bidders' review at the following builders' exchanges:

   A. Builder's Exchange of Santa Clara County (408) 727-4000
   B. Bay Area Builders Exchange (510) 483-8880

6. Sealed bids will be received until **2:00 p.m. on October 1, 2024**, at the District Purchasing Office, 2930 Gay Avenue, San Jose, California 95127 at or after which time the bids will be opened and publicly read aloud. Any bid that is submitted after this time shall be nonresponsive and returned to the bidder. Any claim by a bidder of error in its bid must be made in compliance with section 5100 et seq. of the Public Contract Code.

7. Pursuant to Public Contract Code section 20111.5, only prequalified bidders will be eligible to submit a bid for this Project. Any bid submitted by a bidder who is not prequalified shall be non-responsive and returned unopened by mail to the bidder.

8. All bids shall be on the form provided by the District. Each bid must conform and be responsive to all pertinent Contract Documents, including, but not limited to, the Instructions to Bidders.

9. A bid bond by an admitted surety insurer on the form provided by the District a cashier's check or a certified check, drawn to the order of the Alum Rock Union School District, the amount of ten percent (10%) of the total bid price, shall accompany the Bid Form and Proposal, as a guarantee that the Bidder will, within seven (7) calendar days after the

date of the Notice of Award, enter into a contract with the District for the performance of the services as stipulated in the bid.

10. A mandatory pre-bid conference and site visit will be held on **September 16, 2024**, at **1:00p.m**. at L.U.C.H.A Elementary School – 1711 E. San Antonio Street, San Jose, CA. 95116. All participants are required to sign in front of the Administration Bldg./Front Office. The site visit is expected to take approximately 1 hour. Failure to attend or tardiness will render bid ineligible.

11. The successful Bidder shall be required to furnish a 100% Performance Bond and a 100% Payment Bond if it is awarded the Contract for the Work.

12. The successful Bidder may substitute securities for any monies withheld by the District to ensure performance under the Contract, in accordance with the provisions of section 22300 of the Public Contract Code.

13. The successful bidder will be required to certify that it either meets the Disabled Veteran Business Enterprise ("DVBE") goal of three percent (3%) participation or made a good faith effort to solicit DVBE participation in this Contract if it is awarded the Contract for the Work.

14. The Contractor and all Subcontractors under the Contractor shall pay all workers on all Work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to section 1770 et seq. of the California Labor Code. Prevailing wage rates are also available from the District or on the Internet at: <http://www.dir.ca.gov>.

15. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and subject to the requirements of Title 8 of the California Code of Regulations. The successful Bidder shall comply with all requirements of Division 2, Part 7, Chapter 1, Articles 1-5 of the Labor Code.

16. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on

    A. The base bid amount only.

17. The District has entered into a Project Labor Agreement that is applicable to this Project. A copy of the Project Labor Agreement is available for review at the District Bond Office and may be downloaded from the District's website, https://www.arusd.org/district/departments/business-services/purchasing/bids. The successful bidder and all subcontractors will be required to agree to be bound by the Project Labor Agreement.

18. The Board reserves the right to reject any and all bids and/or waive any irregularity in any bid received. If the District awards the Contract, the security of unsuccessful bidder(s) shall be returned within sixty (60) days from the time the award is made. Unless otherwise required by law, no bidder may withdraw its bid for ninety (90) days after the date of the bid opening.

END OF DOCUMENT

DOCUMENT 00 11 16.1

RFP SCHEDULE

1. The District intends to follow the schedule set forth below for the review and selection process. The District reserves the right to modify this schedule at any time during the RFP schedule.

EVENT	TIME, DATE
Deadline for written questions regarding RFP	2:00p.m. September 19, 2024
Deadline for District's response to written questions timely submitted. **Responses posted on District website via Addenda**	4:00p.m. September 23, 2024
Proposals Due	2:00p.m. October 1, 2024
Selection of Firm	TDB, October 10, 2024

Note: The above dates and times are subject to change at the discretion of the District

2. **Questions.** Questions regarding this RFP must be in writing and directed to **Maria Martinez, District Bonds Manager** at **maria.j.martinez@arusd.org**; and copy **Marc Freitas, District Bonds Director at marc.freitas@arusd.org and Ian Brakey, Construction Manager at ian.brakey@6dpmcm.com** Questions that are not submitted in writing or as directed herein will not be answered. Firms with questions or comments about this RFP or the Project should not contact any other District representative, Board Member, consultant, or employee unless directed to do so by the District.

3. **RFP Addenda.** The District reserves the right to revise any part of this RFP, or to provide clarification or additional information. If the District issue any addenda to the RFP, Firms are responsible for and must acknowledge receipt of addenda in the Firm's Proposal. Failure to acknowledge and response to any addenda issued by the District may, in the District's discretion, render the Firm's Proposal to be deemed non-responsive and may be rejected. All Addenda(s) will be posted on the District website at: https://www.arusd.org/district/departments/business-services/purchasing/bids

Thank you for your interest in working with the Alum Rock Union School District.

END OF DOCUMENT

DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

Bidders shall follow the instructions in this document, and shall submit all documents, forms, and information required for consideration of a bid.

Alum Rock Union School District ("District") will evaluate information submitted by the apparent low Bidder and, if incomplete or unsatisfactory to District, Bidder's bid may be rejected at the sole discretion of District.

1. Bids are requested for a general construction contract, or work described in general, for the following project ("Project" or "Contract"):

   L.U.C.H.A Elementary School Play Structure Sitework Project

2. A Bidder and its subcontractors must possess the appropriate State of California contractors' license and must maintain the license throughout the duration of the project. Bidders must also be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code. Bids submitted by a contractor who is not properly licensed or registered shall be deemed nonresponsive and will not be considered.

3. The District has prequalified bidders pursuant to Public Contract Code section 20111.5. Only prequalified bidders will be eligible to submit a bid for this Project. Any bid submitted by a bidder who is not prequalified shall be deemed nonresponsive and will not be considered.

4. District will receive sealed bids from bidders as stipulated in the Notice to Bidders.

   a. All bids must be sealed in an envelope, marked with the name and address of the Bidder, name of the Project, the Project Number and/or bid number, and time of bid opening.

   b. Bids must be submitted to the District Office (2930 Gay Ave, San Jose, CA 95127) by date and time shown in the Notice to Bidders.

   c. Bids must contain all documents as required herein.

5. Bidders are advised that on the date that bids are opened, telephones will not be available at the District Offices for use by bidders or their representatives.

6. Bids will be opened at or after the time indicated for receipt of bids.

7. Bidders must submit bids on the documents titled Bid Form and Proposal, and must submit all other required District forms. Bids not submitted on the District's required forms shall be deemed nonresponsive and shall not be considered. Additional sheets required to fully respond to requested information are permissible.

8. Bidders shall not modify the Bid Form and Proposal or qualify their bids. Bidders shall not submit to the District a re-formatted, re-typed, altered, modified, or

otherwise recreated version of the Bid Form and Proposal or other District-provided document.

9. Bids shall be clearly written and without erasure or deletions. The District reserves the right to reject any bid containing erasures, deletions, or illegible contents.

10. Bidders must supply all information required by each Bid Document. Bids must be full and complete. The District reserves the right in its sole discretion to reject any bid as nonresponsive as a result of any error or omission in the bid. Bidders must complete and submit all of the following documents with the Bid Form and Proposal:

    a. Bid Bond on the District's form, or other security.

    b. Designated Subcontractors List.

    c. Site Visit Certification, if a site visit was required.

    d. Non-Collusion Declaration.

    e. Addendum Acknowledgement

    f. Project Labor Agreement Participation Acknowledgement

11. Bidders must submit with their bids, a cashier's check or a certified check payable to District, or a bid bond by an admitted surety insurer of not less than ten percent (10%) of amount of Base Bid, plus all additive alternates ("Bid Bond"). If Bidder chooses to provide a Bid Bond as security, Bidder must use the required form of corporate surety provided by District. The Surety on Bidder's Bid Bond must be an insurer admitted in the State of California and authorized to issue surety bonds in the State of California. Bids submitted without necessary bid security will be deemed nonresponsive and will not be considered.

12. If Bidder to whom the Contract is awarded fails or neglects to enter into the Contract and submit required bonds, insurance certificates, and all other required documents, within **SEVEN (7)** calendar days after the date of the Notice of Award, District may deposit Bid Bond, cash, cashier's check, or certified check for collection, and proceeds thereof may be retained by District as liquidated damages for failure of Bidder to enter into Contract, in the sole discretion of District. It is agreed that calculation of damages District may suffer as a result of Bidder's failure to enter into the Contract would be extremely difficult and impractical to determine and that the amount of the Bidder's required bid security shall be the agreed and conclusively presumed amount of damages.

13. Bidders must submit with the bid the Designated Subcontractors List for those subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent (0.5%) of total bid. Failure to submit this list when required by law shall result in bid being deemed nonresponsive and the bid will not be considered.

14. All of the listed subcontractors are required to be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code.

a. An inadvertent error in listing the California contractor license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.

b. An inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

15. If a mandatory pre-bid conference and site visit ("Site Visit") is required as referenced in the Notice to Bidders, then Bidders must submit the Site Visit Certification with their Bid. District will transmit to all prospective Bidders of record such Addenda as District in its discretion considers necessary in response to questions arising at the Site Visit. Oral statements shall not be relied upon and will not be binding or legally effective. Addenda issued by the District as a result of the Site Visit, if any, shall constitute the sole and exclusive record and statement of the results of the Site Visit.

16. Bidders shall submit the Non-Collusion Declaration with their bids. Bids submitted without the Non-Collusion Declaration shall be deemed nonresponsive and will not be considered.

17. The Contractor and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to the Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to sections 1770 et seq. of the California Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the Department of Industrial Relations, are available upon request at the District's principal office. Prevailing wage rates are also available on the internet at http://www.dir.ca.gov.

18. The District has entered into a Project Labor Agreement that is applicable to this Project. A copy of the Project Labor Agreement is available for review at the District Bonds Office. The successful bidder and all subcontractors will be required to agree to be bound by the Project Labor Agreement.

19. Section 17076.11 of the Education Code requires school districts using funds allocated pursuant to the State of California School Facility Program for the construction and/or modernization of school building(s) to have a participation goal for disabled veteran business enterprises ("DVBE") of at least three percent (3%) per

year of the overall dollar amount expended on projects that receive state funding or demonstrate its good faith effort to solicit DVBE participation in this Contract. In order to meet this requirement by demonstrating a good faith effort, Bidder must advertise for DVBE-certified subcontractors and suppliers before submitting its Bid. For any project that is at least partially state-funded, the lowest responsive responsible Bidder awarded the Contract must submit certification of compliance with the procedures for implementation of DVBE contracting goals with its signed Agreement. DVBE Certification form is attached. Do not submit this form with your Bid

20. Submission of bid signifies careful examination of Contract Documents and complete understanding of the nature, extent, and location of Work to be performed. Bidders must complete the tasks listed below as a condition to bidding, and submission of a bid shall constitute the Bidder's express representation to District that Bidder has fully completed the following:

    a. Bidder has visited the Site, if required, and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions and federal, state and local laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto;

    b. Bidder has conducted or obtained and has understood all examinations, investigations, explorations, tests, reports, and studies that pertain to the subsurface conditions, as-built conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance, or furnishing of Work, as Bidder considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time, and in accordance with the other terms and conditions of Contract Documents, including specifically the provisions of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies, or similar information or data are or will be required by Bidder for such purposes;

    c. Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents;

    d. Bidder has given the District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the actual conditions, and the written resolution(s) thereof by the District is/are acceptable to Bidder;

    e. Bidder has made a complete disclosure in writing to the District of all facts bearing upon any possible interest, direct or indirect, that Bidder believes any representative of the District or other officer or employee of the District presently has or will have in this Contract or in the performance thereof or in any portion of the profits thereof;

f. Bidder must, prior to bidding, perform the work, investigations, research, and analysis required by this document and that Bidder represented in its Bid Form and Proposal and the Agreement that it performed prior to bidding. Contractor under this Contract is charged with all information and knowledge that a reasonable bidder would ascertain from having performed this required work, investigation, research, and analysis. Bid prices must include entire cost of all work "incidental" to completion of the Work.

g. Conditions Shown on the Contract Documents: Information as to underground conditions, as-built conditions, or other conditions or obstructions, indicated in the Contract Documents, e.g., on Drawings or in Specifications, has been obtained with reasonable care, and has been recorded in good faith. However, District only warrants, and Bidder may only rely, on the accuracy of limited types of information.

(1) As to above-ground conditions or as-built conditions shown or indicated in the Contract Documents, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated. This information is verifiable by independent investigation and Bidder is required to make such verification as a condition to bidding. In submitting its Bid, Bidder shall rely on the results of its own independent investigation. In submitting its Bid, Bidder shall not rely on District-supplied information regarding above-ground conditions or as-built conditions.

(2) As to any subsurface condition shown or indicated in the Contract Documents, Bidder may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated. District is not responsible for the completeness of such information for bidding or construction; nor is District responsible in any way for any conclusions or opinions that the Bidder has drawn from such information; nor is the District responsible for subsurface conditions that are not specifically shown (for example, District is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown).

h. Conditions Shown in Reports and Drawings Supplied for Informational Purposes: Reference is made to the document entitled Geotechnical Data, and the document entitled Existing Conditions, for identification of:

(1) Subsurface Conditions: Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that have been utilized by Architect in preparing the Contract Documents; and

(2) Physical Conditions: Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that has been utilized by Architect in preparing the Contract Documents.

(3) These reports and drawings are **not** Contract Documents and, except for any "technical" data regarding subsurface conditions specifically identified in Geotechnical Data and Existing Conditions, and

underground facilities data, Bidder may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Bidder must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by District.

21. Bids shall be based on products and systems specified in Contract Documents or listed by name in Addenda. Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Bidder may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified. The District is not responsible and/or liable in any way for a Contractor's damages and/or claims related, in any way, to that Contractor's basing its bid on any requested substitution that the District has not approved in advance and in writing. Contractors and materials suppliers who submit requests for substitutions prior to the award of the Contract must do so in writing and in compliance with Public Contract Code section 3400. All requests must comply with the following:

    a. District must receive any notice of request for substitution of a specified item a minimum of **TEN (10)** calendar days prior to bid opening. The Successful Bidder will not be allowed to substitute specified items unless properly noticed.

    b. Within 35 days after the date of the Notice of Award, the Successful Bidder shall submit data substantiating the request(s) for all substitution(s) containing sufficient information to assess acceptability of product or system and impact on Project, including, without limitation, the requirements specified in the Special Conditions and the Specifications. Insufficient information shall be grounds for rejection of substitution.

    c. Approved substitutions, if any, shall be listed in Addenda. District reserves the right not to act upon submittals of substitutions until after bid opening.

    d. Substitutions may be requested after Contract has been awarded only if indicated in and in accordance with requirements specified in the Special Conditions and the Specifications.

22. Bidders may examine any available "as-built" drawings of previous work by giving District reasonable advance notice. District will not be responsible for accuracy of "as-built" drawings. The document entitled Existing Conditions applies to all supplied "as-built" drawings.

23. All questions about the meaning or intent of the Contract Documents are to be directed via email to the District to **Maria Martinez**, **District Bonds Manager at maria.j.martinez@arusd.org** and copy **Marc Freitas, District Bonds Director at marc.freitas@arusd.org** and **6D PMCM at Ian.Brakey@6dpmcm.com.** Interpretations or clarifications considered necessary by the District in response to such questions will be issued in writing by Addenda and posted on the District's website at https://www.arusd.org/district/departments/business-services/purchasing/bids by **September 23, 2024**. Questions should be received no later than **September 19, 2024 by 2pm** and all questions received after aforementioned date and time may not be answered. Only questions answered by

formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

24. Addenda may also be issued to modify other parts of the Contract Documents as deemed advisable by the District.

25. Each Bidder must acknowledge each Addendum in its Bid Form and Proposal by number or its Bid shall be considered non-responsive. Each Addendum shall be part of the Contract Documents. A complete listing of Addenda may be secured from the District.

26. This Contract may include alternates. Alternates are defined as alternate products, materials, equipment, systems, methods, or major elements of the construction that may, at the District's option and under terms established in the Contract and pursuant to section 20103.8 of the Public Contract Code, be selected for the Work.

27. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on the criteria as indicated in the Notice to Bidders. In the event two or more responsible bidders submit identical bids, the District shall select the Bidder to whom to award the Contract by lot.

28. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of figures or numerals.

29. Bidders in contention for contract awards shall be required to attend a Post-Bid interview, which will be set within three (3) calendar days following bid opening. A duly authorized representative of the apparent low bidder is required to attend the Post Bid Interview, in person. The apparent low bidder's authorized representative(s) must have (1) knowledge of how the bid submitted was prepared, (2) the person responsible for supervising performance of the Work, and (3) the authority to bind the apparent low bidder. Failure to attend the Post Bid Interview as scheduled will be considered just cause for the District to reject the Bid as nonresponsive.

30. Any bid protest by any Bidder regarding any other bid must be submitted in writing to the District, before 5:00 p.m. of the **THIRD (3rd)** business day following bid opening.

    a. Only a Bidder who has actually submitted a bid, and who could be awarded the Contract if the bid protest is upheld, is eligible to submit a bid protest. Subcontractors are not eligible to submit bid protests. A Bidder may not rely on the bid protest submitted by another Bidder.

    b. A bid protest must contain a complete statement of any and all bases for the protest and all supporting documentation. Materials submitted after the bid protest deadline will not be considered.

    c. The protest must refer to the specific portions of all documents that form the basis for the protest.

        (1) Without limitation to any other basis for protest, an inadvertent error in listing the California contractor's license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or

grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.

(2) Without limitation to any other basis for protest, an inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:

(i) The subcontractor is registered prior to the bid opening.

(ii) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.

(iii) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

d. The protest must include the name, address and telephone number of the person representing the protesting party.

e. The party filing the protest must concurrently transmit a copy of the protest and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders or proposers who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

f. The procedure and time limits set forth in this paragraph are mandatory and are each bidder's sole and exclusive remedy in the event of bid protest. Failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings.

31. The Bidder to whom Contract is awarded shall execute and submit the following documents by 5:00 p.m. of the **SEVENTH (7th)** calendar day following the date of the Notice of Award. Failure to properly and timely submit these documents entitles District to reject the bid as nonresponsive.

a. Agreement: To be executed by successful Bidder. Submit four (4) copies, each bearing an original signature.

b. Escrow of Bid Documentation: This must include all required documentation. See the document titled Escrow Bid Documentation for more information.

c. Performance Bond (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.

d. Payment Bond (Contractor's Labor and Material Bond) (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.

e. Insurance Certificates and Endorsements as required.

f. Workers' Compensation Certification.

g. Prevailing Wage and Related Labor Requirements Certification.

h. Disabled Veteran Business Enterprise Participation Certification

i. Drug-Free Workplace Certification

j. Tobacco-Free Environment Certification.

k. Criminal Background Investigation/Fingerprinting Certification.

l. Registered Subcontractors List: Must include Department of Industrial Relations (DIR) registration number of each subcontractor for all tiers

32. Time for Completion: District may issue a Notice to Proceed within **NINETY (90)** days from the date of the Notice of Award. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.

a. In the event that the District desires to postpone issuing the Notice to Proceed beyond this 90-day period, it is expressly understood that with reasonable notice to the Contractor, the District may postpone issuing the Notice to Proceed.

b. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed beyond a 90-day period. If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to the Contractor, the Contractor may terminate the Contract. Contractor's termination due to a postponement beyond this 90-day period shall be by written notice to District within **TEN (10)** calendar days after receipt by Contractor of District's notice of postponement.

c. It is further understood by the Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement and which the District had in writing authorized Contractor to perform prior to issuing a Notice to Proceed.

d. Should the Contractor terminate the Contract as a result of a notice of postponement, District shall have the authority to award the Contract to the next lowest responsive responsible bidder.

33. District reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, nonresponsive, unbalanced, or conditional bids, to re-bid, and to reject the bid of any bidder if District believes that it would not be in the best interest of the District to make an award to that bidder, whether because the bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by District. District also reserves the right to waive any inconsequential deviations or

irregularities in any bid. For purposes of this paragraph, an "unbalanced bid" is one having nominal prices for some work items and/or enhanced prices for other work items.

34. It is the policy of the District that no qualified person shall be excluded from participating in, be denied the benefits of, or otherwise be subjected to discrimination in any consideration leading to the award of contract, based on race, color, gender, sexual orientation, political affiliation, age, ancestry, religion, marital status, national origin, medical condition or disability. The Successful Bidder and its subcontractors shall comply with applicable federal and state laws, including, but not limited to the California Fair Employment and Housing Act, beginning with Government Code section 12900, and Labor Code section 1735.

35. Prior to the award of Contract, District reserves the right to consider the responsibility of the Bidder. District may conduct investigations as District deems necessary to assist in the evaluation of any bid and to establish the responsibility, including, without limitation, qualifications and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to District's satisfaction within the prescribed time.

END OF DOCUMENT

DOCUMENT 00 41 13

BID FORM AND PROPOSAL

To: Governing Board of the Alum Rock Union School District ("District" or "Owner")

From: _____
(Proper Name of Bidder)

The undersigned declares that Bidder has read and understands the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications of Bid No. 2425-Bonds05 / Project No. 3 for the following project known as:

_____

("Project" or "Contract") and will accept in full payment for that Work the following total lump sum amount, all taxes included:

_____ dollars $ _____

BASE BID

Bidder acknowledges and agrees that the Base Bid accounts for any and all Allowance(s), Total Cost for Unit Prices

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

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Additional Detail Regarding Calculation of Base Bid

1. **Unit Prices**. The Bidder's Base Bid includes the following unit prices, which the Bidder must provide and the District may, at its discretion, utilize in valuing additive and/or deductive change orders (Unit Prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and suppliers):

   SCHEDULE OF UNIT PRICES

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Cost = Unit Price x Estimated Quantity (Included in Base Bid)
1.	Not Used			$ _____	$ _____

   Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted, and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intentions of the Drawings and Specifications shall be included in the above agreed-upon price amount.

2. **Allowance/Contingency** The Bidder's Base Bid shall include at ten percent (10%) contingency for unforeseen items/conditions.

   The above contingency shall only be allocated for unforeseen items/conditions or public health emergency/epidemic/pandemic compliance relating to the work; if necessary. Contractor shall not bill for or be due any portion of this contingency amount unless the District has identified specific work, Contractor has submitted a price for that work or the District has proposed a price for that work, the District has accepted the cost for that work, and the District has prepared a change order incorporating that work. Contractor hereby authorizes the District to execute a unilateral deductive change order at or near the end of the project for all or any portion of the contingency not allocated. Any unused portion of the contingency will revert back to the District documented by a deductive change order.

3. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

4. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.

5. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.

6. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.

7. It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.

8. The following documents are attached hereto:

   - Bid Bond on the District's form or other security
   - Designated Subcontractors List
   - Site Visit Certification
   - Non-Collusion Declaration
   - Project Labor Agreement Participation Acknowledgement
   - Addendum Acknowledgement

9. Receipt and acceptance of the following Addenda is hereby acknowledged:

No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____

10. Bidder acknowledges that the license required for performance of the Work is a A, B C-8 and/or C-12 license.

11. Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

12. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.

13. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract

14. Bidder agrees to comply with all requirements of the Project Labor Agreement.

15. Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.

16. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.

17. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Gov. Code, § 12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

18. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this _____ day of _____ 20 ____

Name of Bidder: _____

Type of Organization: _____

Signature: _____

Print Name: _____

Title: _____

Address of Bidder: _____

Taxpayer Identification No. of Bidder: _____

Telephone Number: _____

Fax Number: _____

E-mail: _____ Web Page: _____

Contractor's License No(s): No.: _____ Class: _____ Expiration Date: _____

No.: _____ Class:_____ Expiration Date: _____

No.: _____ Class:_____ Expiration Date: _____

Public Works Contractor Registration No.: _____

END OF DOCUMENT

DOCUMENT 00 43 13

BID BOND

(Note: If Bidder is providing a bid bond as its bid security, Bidder must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

That the undersigned,_____, as Principal ("Principal"),

and _____, as Surety ("Surety"), a corporation organized and existing under and by virtue of the laws of the State of California and authorized to do business as a surety in the State of California, are held and firmly bound unto the Alum Rock Union School District ("District") of Santa Clara County, State of California, as Obligee, in an amount equal to ten percent (10%) of the Base Bid plus alternates, in the sum of

_____ Dollars ($ _____)

lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted a bid to the District for all Work specifically described in the accompanying bid for the following project: L.U.C.H.A Elementary School Play Structure Sitework Project ("Project" or "Contract").

NOW, THEREFORE, if the Principal is awarded the Contract and, within the time and manner required under the Contract Documents, after the prescribed forms are presented to Principal for signature, enters into a written contract, in the prescribed form in accordance with the bid, and files two bonds, one guaranteeing faithful performance and the other guaranteeing payment for labor and materials as required by law, and meets all other conditions to the Contract between the Principal and the Obligee becoming effective, or if the Principal shall fully reimburse and save harmless the Obligee from any damage sustained by the Obligee through failure of the Principal to enter into the written contract and to file the required performance and labor and material bonds, and to meet all other conditions to the Contract between the Principal and the Obligee becoming effective, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. The full payment of the sum stated above shall be due immediately if Principal fails to execute the Contract within seven (7) days of the date of the District's Notice of Award to Principal.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the call for bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorneys' fee to be fixed by the Court.

If the District awards the bid, the security of unsuccessful bidder(s) shall be returned within sixty (60) days from the time the award is made. Unless otherwise required by law, no bidder may withdraw its bid for ninety (90) days after the date of the bid opening.

IN WITNESS WHEREOF, this instrument has been duty executed by the Principal and Surety above named, on the _____ day of _____, 20___.

_____
Principal

_____
By

_____
Surety

_____
By

_____
Name of California Agent of Surety

_____
Address of California Agent of Surety

_____
Telephone Number of California Agent of Surety

Bidder must attach Power of Attorney and Certificate of Authority for Surety and a Notarial Acknowledgment for all Surety's signatures. The California Department of Insurance must authorize the Surety to be an admitted Surety Insurer.

END OF DOCUMENT

DOCUMENT 00 43 36

DESIGNATED SUBCONTRACTORS LIST
(Public Contact Code Sections 4100-4114)

PROJECT: L.U.C.H.A Elementary School Play Structure Sitework Project

Bidder acknowledges and agrees that it must clearly set forth below the name, location and California contractor license number of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Work or who will specially fabricate and install a portion of the Work according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent (0.5%) of Bidder's total Base Bid and the kind of Work that each will perform. Vendors or suppliers of materials only do not need to be listed.

Bidder acknowledges and agrees that, if Bidder fails to list as to any portion of Work, or if Bidder lists more than one subcontractor to perform the same portion of Work, Bidder must perform that portion itself or be subjected to penalty under applicable law. In case more than one subcontractor is named for the same kind of Work, state the portion of the kind of Work that each subcontractor will perform.

If alternate bid(s) is/are called for and Bidder intends to use subcontractors different from or in addition to those subcontractors listed for work under the Base Bid, Bidder must list subcontractors that will perform Work in an amount in excess of one half of one percent (0.5%) of Bidder's total Base Bid plus alternate(s).

If further space is required for the list of proposed subcontractors, attach additional copies of page 2 showing the required information, as indicated below.

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

DIR Registration #: _____

Portion of Work: _____

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DOCUMENT 00 45 01

SITE VISIT CERTIFICATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
IF SITE VISIT WAS MANDATORY

PROJECT: L.U.C.H.A Elementary School Play Structure Sitework Project

Check option that applies:

_____ I certify that I visited the Site of the proposed Work, received the attached _____ pages of information, and became fully acquainted with the conditions relating to construction and labor. I fully understand the facilities, difficulties, and restrictions attending the execution of the Work under contract.

_____ I certify that _____ (Bidder's representative) visited the Site of the proposed Work, received the attached _____ pages of information, and became fully acquainted with the conditions relating to construction and labor. The Bidder's representative fully understood the facilities, difficulties, and restrictions attending the execution of the Work under contract.

Bidder fully indemnifies the Alum Rock Union School District, its Architect, its Engineers, its Construction Manager, and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during my visit and/or the Bidder's representative's visit to the Site.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

ATTACHMENTS:

1.

2.

3.

END OF DOCUMENT

DOCUMENT 00 45 19

NON-COLLUSION DECLARATION
(Public Contract Code Section 7106)

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.
[Title] [Name of Firm]

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____,
[Date]

at _____, _____.
[City] [State]

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 Gay Avenue, San José, CA 95127 · Phone: 408-928-6800 · Fax: 408-928-6416 · www.arusd.org

STUDIO W ARCHITECTS ADDENDUM

PROJECT NO. 3
L.U.C.H.A ELEMENTARY SCHOOL PLAY STRUCTURE SITEWORK PROJECT

Please submit a signed copy of this addendum acknowledgement with your RFP response.

Company Name: _____

Signature: _____

Emmanuel Barbara, Interim Superintendent

Board of Trustees: Corina Herrera-Loera, President, Andrés Quintero, Vice-President
Andrea Flores Shelton, Clerk ·Minh Pham, Member· Linda Chavez, Member

ALUM ROCK
UNION ELEMENTARY SCHOOL DISTRICT

2930 Gay Avenue, San José, CA 95127 · Phone: 408-928-6800 · Fax: 408-928-6416 · www.arusd.org

ALUM ROCK UNION SCHOOL DISTRICT PLA AGREEMENT

PROJECT NO. 3
L.U.C.H.A ELEMENTARY SCHOOL PLAY STRUCTURE SITEWORK PROJECT

See attached PLA Agreement.

Please submit a signed copy of this PLA agreement acknowledgement with your RFP response.

Company Name: _____

Signature: _____

Emmanuel Barbara, Interim Superintendent

Board of Trustees: Corina Herrera-Loera, President, Andrés Quintero, Vice-President
Andrea Flores Shelton, Clerk ·Minh Pham, Member· Linda Chavez, Member

DOCUMENT 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Site Access Conditions and Requirements;

B. Special Conditions.

1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of this Contract consists of the following:

Installation of new play structure, integrated 26 diameter, 12'x12' and PC shade structure along with new ground surface and path of travel upgrades, which include removing and replacing areas of concrete walk along path of travel from accessible parking to unisex adult restrooms, boys' and girls' restrooms, drinking fountain and proposed play structure and staff gender restroom at classroom B.

1.03 CONTRACTS

A. Perform the Work under a single, fixed-price Contract.

1.04 WORK BY OTHERS

A. Work on the Project that will be performed and completed prior to the start of the Work of this Contract: Not Applicable

B. Work on the Project that will be performed by others concurrent with the Work of this Contract: Not Applicable

1.05 CODES, REGULATIONS, AND STANDARDS

A. The codes, regulations, and standards adopted by the state and federal agencies having jurisdiction shall govern minimum requirements for this Project. Where codes, regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the District and the Architect.

B. Codes, regulations, and standards shall be as published effective as of date of bid opening, unless otherwise specified or indicated.

1.06 PROJECT RECORD DOCUMENTS

A. Contractor shall maintain on Site one set of the following record documents; Contractor shall record actual revisions to the Work:

(1) Contract Drawings.

(2) Specifications.

(3) Addenda.

(4) Change Orders and other modifications to the Contract.

(5) Reviewed shop drawings, product data, and samples.

(6) Field test records.

(7) Inspection certificates.

(8) Manufacturer's certificates.

B. Contractor shall store Record Documents separate from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.

C. Contractor shall record information concurrent with construction progress.

D. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:

(1) Manufacturer's name and product model and number.

(2) Product substitutions or alternates utilized.

(3) Changes made by Addenda and Change Orders and written directives.

1.07 EXAMINATION OF EXISTING CONDITIONS

A. Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site and of the streets or roads approaching the Site.

B. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage.

C. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the District and the Architect.

1.08 CONTRACTOR'S USE OF PREMISES

A. If unoccupied and only with District's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the District chooses to beneficially occupy any building(s), Contractor must obtain the District's written approval for Contractor's use of spaces and types of operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.

B. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor.

C. Contractor shall not interfere with use of or access to occupied portions of the building(s) or adjacent property.

D. Contractor shall maintain corridors, stairs, halls, and other exit-ways of building clear and free of debris and obstructions at all times.

E. No one other than those directly involved in the demolition and construction, or specifically designated by the District or the Architect shall be permitted in the areas of work during demolition and construction activities.

F. The Contractor shall install the construction fence and maintain that it will be locked when not in use. Keys to this fencing will be provided to the District.

1.09 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

A. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the District's satisfaction.

B. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the District for disposition of same as indicated in the General Conditions.

1.10 UTILITY SHUTDOWNS AND INTERRUPTIONS

A. Contractor shall give the District a minimum of three (3) days written notice in advance of any need to shut off existing utility services or to effect equipment interruptions. The District will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to re-establish utility services shall be performed by the Contractor.

B. Contractor shall obtain District's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with District's use of the building(s) or adjacent facilities.

1.11 STRUCTURAL INTEGRITY

A. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.

B. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 21 00

ALLOWANCE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Non-specified work.

1.2 RELATED SECTIONS

A. Document 01 10 00 (Summary of Work)

B. Document 01 29 00 (Payments and Completion)

C. Document 01 32 19 (Submittal Procedures)

1.3 ALLOWANCES

A. Included in the Contract, a stipulated sum/price of ten percent **[10%] of base bid** as an allowance for Unforeseen Conditions within the limits set forth in the Contract Documents. This Allowance shall not be utilized without written approval by the District.

B. Contractor's costs, without overhead and profit, for products, delivery, installation, labor, insurance, payroll, taxes, bonding and equipment rental will be included in Allowance Expenditure Directive authorizing expenditure of funds from this Allowance. No overhead and profit shall be added to the Allowance Expenditure Directive.

C. Funds will be drawn from Allowance only with District approval evidenced by an Allowance Expenditure Directive.

D. At Contract closeout, funds remaining in Allowance will be credited to District by Change Order.

E. Whenever costs are more than the Allowance, the amount covered by the Allowance will be approved at cost. The Contract Price shall be adjusted by Change Order for amounts in excess of the Allowance.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF DOCUMENT

DOCUMENT 01 22 00

ALTERNATES AND UNIT PRICING

PART 1 – ALTERNATES

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions;

C. Bid Form and Proposal;

D. Instruction to Bidders.

1.02 DESCRIPTION

The items of work indicated below propose modifications to, substitutions for, additions to and/or deletions from the various parts of the Work specified in other Sections of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the District subject to District's acceptance of Contractor's stated prices contained in this Proposal.

1.03 GENERAL

Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an item is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

1.04 BASE BID

The Base Bid includes all work required to construct the Project completely, including a ten percent (10%) contingency for unforeseen items, and in accordance with the Contract Documents.

1.05 ALTERNATES

A. Not Applicable

The above Alternate descriptions are general in nature and for reference purposes only. The Contract Documents, including, without limitation, the Drawings and Specifications, must be referred to for the complete scope of Work.

PART 2 - UNIT PRICING

2.01 GENERAL

Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

2.02 UNIT PRICES

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

END OF DOCUMENT

DOCUMENT 01 25 13

PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. Instructions to Bidders;

B. General Conditions, including, without limitation, Substitutions For Specified Items; and

C. Special Conditions.

1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT

A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions.

B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternative-named manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the District and/or the Architect, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.

C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions. The District’s Board has found and determined that certain item(s) shall be used on this Project based on the purpose(s) indicated pursuant to Public Contract Code section 3400(c). These findings, as well as the products and brand or trade names, have been identified in the Notice to Bidders.

D. The Contractor will not be allowed to substitute specified items unless the request for substitution is submitted as follows:

(1) District must receive any notice of request for substitution of a specified item a minimum of ten (10) calendar days prior to bid opening.

(2) Within 35 days after the date of the Notice of Award, the Contractor shall submit data substantiating the request(s) for all substitution(s) containing sufficient information to assess acceptability of product or system and impact on Project, including, without limitation, the requirements specified in the Special Conditions and the technical Specifications. Insufficient information shall be grounds for rejection of substitution.

E. If the District and/or Architect, in reviewing proposed substitute materials and equipment, require revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the District and/or Architect to be unacceptable, the specified material or equipment shall be provided.

F. Samples may be required. Tests required by the District and/or Architect for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the District.

G. In reviewing the supporting data submitted for substitutions, the District and/or Architect will use for purposes of comparison all the characteristics of the specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. If more than two (2) submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Contractor, and the District will deduct the costs from the Contract Price. The Contractor shall be responsible for any re-design costs occasioned by District's acceptance and/or approval of any substitute.

H. The Contractor shall, in the event that a substitute is less costly than that specified, credit the District with one hundred percent (100%) of the net difference between the substitute and the originally specified material. In this event, the Contractor agrees to execute a deductive Change Order to reflect that credit. In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished shall be borne by Contractor.

I. In no event shall the District be liable for any increase in Contract Price or Contract Time due to any claimed delay in the evaluation of any proposed substitute or in the acceptance or rejection of any proposed substitute.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 26 00

CHANGES IN THE WORK

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS IN THE AGREEMENT, GENERAL CONDITIONS, AND SPECIAL CONDITIONS, IF USED, RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES.

END OF DOCUMENT

DOCUMENT 01 29 00

APPLICATION FOR PAYMENT AND CONDITIONAL AND UNCONDITIONAL WAIVER AND RELEASE FORMS

CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS IN THE GENERAL CONDITIONS RELATED TO APPLICATIONS FOR PAYMENT AND/OR PAYMENTS.

CONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(CIVIL CODE SECTION 8132)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Through Date: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____

Amount of Check: $_____

Check Payable to: _____

Exceptions

This document does not affect any of the following:

(1) Retentions.

(2) Extras for which the claimant has not received payment.

(3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:

Date(s) of waiver and release: _____

Amount(s) of unpaid progress payment(s): $_____

(4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(CIVIL CODE SECTION 8134)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Through Date: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: $_____

Exceptions

This document does not affect any of the following:

(1) Retentions.

(2) Extras for which the claimant has not received payment.

(3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

CONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(CIVIL CODE SECTION 8136)

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check:

Amount of Check: $_____

Check Payable to: _____

Exceptions

This document does not affect any of the following: _____

Disputed claims for extras in the amount of: $_____

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

UNCONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(CIVIL CODE SECTION 8138)

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect any of the following: _____

Disputed claims for extras in the amount of: $_____

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

DOCUMENT 01 31 19

PROJECT MEETINGS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions; and

B. Special Conditions.

1.02 PROGRESS MEETINGS:

A. Contractor shall schedule and hold regular weekly progress meetings after a minimum of one week's prior written notice of the meeting date and time to all Invitees as indicated below.

B. Location: Contractor's field office.

C. The Contractor shall notify and invite the following entities ("Invitees"):

(1) District Representative.

(2) Contractor.

(3) Contractor's Project Manager.

(4) Contractor's Superintendent.

(5) Subcontractors, as appropriate to the agenda of the meeting.

(6) Suppliers, as appropriate to the agenda of the meeting.

(7) Construction Manager, if any.

(8) Architect

(9) Engineer(s), if any and as appropriate to the agenda of the meeting.

(10) Others, as appropriate to the agenda of the meeting.

D. The District's and/or the Architect's Consultants will attend at their discretion, in response to the agenda.

E. The District representative, the Construction Manager, and/or another District Agent shall take and distribute meeting notes to attendees and other concerned parties. If exceptions are taken to anything in the meeting notes,

those exceptions shall be stated in writing to the District within five (5) working days following District's distribution of the meeting notes.

1.03 PRE-INSTALLATION/PERFORMANCE MEETING:

A. Contractor shall schedule a meeting prior to the start of the Work for coordination purposes. Contractor shall invite all Invitees to this meeting, and others whose work may affect or be affected by the quality of the cutting and patching work.

B. Contractor shall review in detail prior to this meeting, the manufacturer's requirements and specifications, applicable portions of the Contract Documents, Shop Drawings, and other submittals, and other related work. At this meeting, invitees shall review and resolve conflicts, incompatibilities, or inadequacies discovered or anticipated.

C. Contractor shall review in detail Project conditions, schedule, requirements for performance, application, installation, and quality of completed Work, and protection of adjacent Work and property.

D. Contractor shall review in detail means of protecting the completed Work during the remainder of the construction period.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 32 13

SCHEDULING OF WORK

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions;

C. Summary of Work; and

D. Submittals.

1.02 SECTION INCLUDES

A. Scheduling of Work under this Contract shall be performed by Contractor in accordance with requirements of this Section.

(1) Development of schedule, cost and resource loading of the schedule, monthly payment requests, and project status reporting requirements of the Contract shall employ computerized Critical Path Method ("CPM") scheduling ("CPM Schedule").

(2) CPM Schedule shall be cost loaded based on Schedule of Values as approved by District.

(3) Submit schedules and reports as specified in the General Conditions.

B. Upon Award of Contract, Contractor shall immediately commence development of Initial and Original CPM Schedules to ensure compliance with CPM Schedule submittal requirements.

1.03 CONSTRUCTION SCHEDULE

A. Within ten (10) days of issuance of the Notice to Proceed and before request for first progress payment, the Contractor shall prepare and submit to the Project Manager a construction progress schedule conforming to the Milestone Schedule below.

B. The Construction Schedule shall be continuously updated, and an updated schedule shall be submitted with each application for progress payment. Each revised schedule shall indicate the work actually accomplished during the previous period and the schedule for completion of the remaining work.

C. Milestone Schedule:

ACTIVITY DESCRIPTION	**REQUIRED COMPLETION**
CONSTRUCTION STARTS	**10/21/2024**
FINAL PROJECT COMPLETION	**01/24/2025**

1.04 QUALIFICATIONS

A. Contractor shall employ experienced scheduling personnel qualified to use the latest version of [i.e., Primavera Project Planner]. Experience level required is set forth below. Contractor may employ such personnel directly or may employ a consultant for this purpose.

(1) The written statement shall identify the individual who will perform CPM scheduling.

(2) Capability and experience shall be verified by description of construction projects on which individual has successfully applied computerized CPM.

(3) Required level of experience shall include at least two (2) projects of similar nature and scope with value not less than three fourths (¾) of the Total Bid Price of this Project. The written statement shall provide contact persons for referenced projects with current telephone and address information.

B. District reserves the right to approve or reject Contractor's scheduler or consultant at any time. District reserves the right to refuse replacing of Contractor's scheduler or consultant, if District believes replacement will negatively affect the scheduling of Work under this Contract.

1.05 GENERAL

A. Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents.

B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in the Contract, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. Any such agreement shall be formalized by a Change Order.

(1) District is not required to accept an early completion schedule, i.e., one that shows an earlier completion date than the Contract Time.

(2) Contractor shall not be entitled to extra compensation in event agreement is reached on an earlier completion schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in its early completion schedule but within the Contract Time.

(3) A schedule showing the work completed in less than the Contract Time, and that has been accepted by District, shall be considered to

have Project Float. The Project Float is the time between the scheduled completion of the work and the Completion Date. Project Float is a resource available to both District and the Contractor.

C. Ownership Project Float: Neither the District nor Contractor owns Project Float. The Project owns the Project Float. As such, liability for delay of the Completion Date rests with the party whose actions, last in time, actually cause delay to the Completion Date.

(1) For example, if Party A uses some, but not all of the Project Float and Party B later uses remainder of the Project Float as well as additional time beyond the Project Float, Party B shall be liable for the time that represents a delay to the Completion Date.

(2) Party A would not be responsible for the time since it did not consume the entire Project Float and additional Project Float remained; therefore, the Completion Date was unaffected by Party A.

D. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract CPM Schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.

E. Failure of Progress Schedule to include any element of the Work, or any inaccuracy in Progress Schedule, will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for means and methods of construction.

F. Software: Software shall be compatible with Windows operating system. Contractor shall transmit contract file to District on compact disk at times requested by District.

G. Transmit each item under the form approved by District.

(1) Identify Project with District Contract number and name of Contractor.

(2) Provide space for Contractor's approval stamp and District's review stamps.

(3) Submittals received from sources other than Contractor will be returned to the Contractor without District's review.

1.06 INITIAL CPM SCHEDULE

A. Initial CPM Schedule submitted for review at the pre-construction conference shall serve as Contractor's schedule for up to ninety (90) calendar days after the Notice to Proceed.

B. Indicate detailed plan for the Work to be completed in first ninety (90) days of the Contract; details of planned mobilization of plant and equipment;

sequence of early operations; procurement of materials and equipment. Show Work beyond ninety (90) calendar days in summary form.

C. Initial CPM Schedule shall be time scaled.

D. Initial CPM Schedule shall be cost and resource loaded. Accepted cost and resource loaded schedule will be used as basis for monthly progress payments until acceptance of the Original CPM Schedule. Use of Initial CPM Schedule for progress payments shall not exceed ninety (90) calendar days.

E. District and Contractor shall meet to review and discuss the Initial CPM Schedule within seven (7) calendar days after it has been submitted to District.

(1) District's review and comment on the schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).

(2) Contractor shall make corrections to schedule necessary to comply with Contract requirements and shall adjust schedule to incorporate any missing information requested by District. Contractor shall resubmit Initial CPM Schedule if requested by District.

F. If, during the first ninety (90) days after Notice to Proceed, the Contractor is of the opinion that any of the Work included on its Initial CPM Schedule has been impacted, the Contractor shall submit to District a written Time Impact Evaluation ("TIE") in accordance with Article 1.12 of this Section. The TIE shall be based on the most current update of the Initial CPM Schedule.

1.07 ORIGINAL CPM SCHEDULE

A. Submit a detailed proposed Original CPM Schedule presenting an orderly and realistic plan for completion of the Work in conformance with requirements as specified herein.

B. Progress Schedule shall include or comply with following requirements:

(1) Time scaled, cost and resource (labor and major equipment) loaded CPM schedule.

(2) No activity on schedule shall have duration longer than fifteen (15) work days, with exception of submittal, approval, fabrication and procurement activities, unless otherwise approved by District.

(a) Activity durations shall be total number of actual work days required to perform that activity.

(3) The start and completion dates of all items of Work, their major components, and milestone completion dates, if any.

(4) District furnished materials and equipment, if any, identified as separate activities.

(5) Activities for maintaining Project Record Documents.

(6) Dependencies (or relationships) between activities.

(7) Processing/approval of submittals and shop drawings for all material and equipment required per the Contract. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates.

(a) Include time for submittals, re-submittals and reviews by District. Coordinate with accepted schedule for submission of Shop Drawings, samples, and other submittals.

(b) Contractor shall be responsible for all impacts resulting from re-submittal of Shop Drawings and submittals.

(8) Procurement of major equipment, through receipt and inspection at jobsite, identified as separate activity.

(a) Include time for fabrication and delivery of manufactured products for the Work.

(b) Show dependencies between procurement and construction.

(9) Activity description; what Work is to be accomplished and where.

(10) The total cost of performing each activity shall be total of labor, material, and equipment, excluding overhead and profit of Contractor. Overhead and profit of the General Contractor shall be shown as a separate activity in the schedule. Sum of cost for all activities shall equal total Contract value.

(11) Resources required (labor and major equipment) to perform each activity.

(12) Responsibility code for each activity corresponding to Contractor or Subcontractor responsible for performing the Work.

(13) Identify the activities which constitute the controlling operations or critical path. No more than twenty-five (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to (10) days.

(14) Twenty (20) workdays for developing punch list(s), completion of punch-list items, and final clean up for the Work or any designated portion thereof. No other activities shall be scheduled during this period.

(15) Interface with the work of other contractors, District, and agencies such as, but not limited to, utility companies.

(16) Show detailed Subcontractor Work activities. In addition, furnish copies of Subcontractor schedules upon which CPM was built.

(a) Also furnish for each Subcontractor, as determined by District, submitted on Subcontractor letterhead, a statement certifying that Subcontractor concurs with Contractor's Original CPM Schedule and that Subcontractor's related schedules have been incorporated, including activity duration, cost and resource loading.

(b) Subcontractor schedules shall be independently derived and not a copy of Contractor's schedule.

(c) In addition to Contractor's schedule and resource loading, obtain from electrical, mechanical, and plumbing Subcontractors, and other Subcontractors as required by District, productivity calculations common to their trades, such as units per person day, feet of pipe per day per person, feet of wiring per day per person, and similar information.

(d) Furnish schedule for Contractor/Subcontractor CPM schedule meetings which shall be held prior to submission of Original CPM schedule to District. District shall be permitted to attend scheduled meetings as an observer.

(17) Activity durations shall be in Work days.

(18) Submit with the schedule a list of anticipated non-Work days, such as weekends and holidays. The Progress Schedule shall exclude in its Work day calendar all non-Work days on which Contractor anticipates critical Work will not be performed.

C. Original CPM Schedule Review Meeting: Contractor shall, within sixty (60) days from the Notice to Proceed date, meet with District to review the Original CPM Schedule submittal.

(1) Contractor shall have its Project Manager, Project Superintendent, Project Scheduler, and key Subcontractor representatives, as required by District, in attendance. The meeting will take place over a continuous one (1) day period.

(2) District's review will be limited to submittal's conformance to Contract requirements including, but not limited to, coordination requirements. However, review may also include:

(a) Clarifications of Contract Requirements.

(b) Directions to include activities and information missing from submittal.

(c) Requests to Contractor to clarify its schedule.

(3) Within five (5) days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District at the Meeting.

1.08 ADJUSTMENTS TO CPM SCHEDULE

A. Adjustments to Original CPM Schedule: Contractor shall have adjusted the Original CPM Schedule submittal to address all review comments from original CPM Schedule review meeting and resubmit network diagrams and reports for District's review.

(1) District, within ten (10) days from date that Contractor submitted the revised schedule, will either:

(a) Accept schedule and cost and resource loaded activities as submitted, or

(b) Advise Contractor in writing to review any part or parts of schedule which either do not meet Contract requirements or are unsatisfactory for District to monitor Project's progress, resources, and status or evaluate monthly payment request by Contractor.

(2) District may accept schedule with conditions that the first monthly CPM Schedule update be revised to correct deficiencies identified.

(3) When schedule is accepted, it shall be considered the "Original CPM Schedule" which will then be immediately updated to reflect the current status of the work.

(4) District reserves right to require Contractor to adjust, add to, or clarify any portion of schedule which may later be discovered to be insufficient for monitoring of Work or approval of partial payment requests. No additional compensation will be provided for such adjustments, additions, or clarifications.

B. Acceptance of Contractor's schedule by District will be based solely upon schedule's compliance with Contract requirements.

(1) By way of Contractor assigning activity durations and proposing sequence of Work, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with the schedule.

(2) Upon submittal of schedule update, updated schedule shall be considered "current" CPM Schedule.

(3) Submission of Contractor's schedule to District shall not relieve Contractor of total responsibility for scheduling, sequencing, and pursuing Work to comply with requirements of Contract Documents, including adverse effects such as delays resulting from ill-timed Work.

C. Submittal of Original CPM Schedule, and subsequent schedule updates, shall be understood to be Contractor's representation that the Schedule meets requirements of Contract Documents and that Work shall be executed in sequence indicated on the schedule.

D. Contractor shall distribute Original CPM Schedule to Subcontractors for review and written acceptance, which shall be noted on Subcontractors' letterheads to Contractor and transmitted to District for the record.

1.09 MONTHLY CPM SCHEDULE UPDATE SUBMITTALS

A. Following acceptance of Contractor's Original CPM Schedule, Contractor shall monitor progress of Work and adjust schedule each month to reflect actual progress and any anticipated changes to planned activities.

(1) Each schedule update submitted shall be complete, including all information requested for the Original CPM Schedule submittal.

(2) Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed.

B. A meeting will be held on approximately the twenty-fifth (25th) of each month to review the schedule update submittal and progress payment application.

(1) At this meeting, at a minimum, the following items will be reviewed: Percent (%) complete of each activity; Time Impact Evaluations for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.

(2) These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. At a minimum, these meetings shall be attended by Contractor's General Superintendent and Scheduler.

(3) Contractor shall plan on the meeting taking no less than four (4) hours.

C. Within five (5) working days after monthly schedule update meeting, Contractor shall submit the updated CPM Schedule update.

D. Within five (5) work days of receipt of above noted revised submittals, District will either accept or reject monthly schedule update submittal.

(1) If accepted, percent (%) complete shown in monthly update will be basis for Application for Payment by the Contractor. The schedule update shall be submitted as part of the Contractor's Application for Payment.

(2) If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.

E. Neither updating, changing or revising of any report, curve, schedule, or narrative submitted to District by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall

have the effect of amending or modifying in any way the Completion Date or milestone dates or of modifying or limiting in any way Contractor's obligations under this Contract.

1.10 SCHEDULE REVISIONS

A. Updating the Schedule to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, revisions to activity durations and sequences are expected on a monthly basis.

B. To reflect revisions to the Schedule, the Contractor shall provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram which compares the original sequence to the revised sequence of work. The Contractor shall provide the written narrative and schedule diagram for revisions two (2) working days in advance of the monthly schedule update meeting.

C. Schedule revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District. District may request further information and justification for schedule revisions and Contractor shall, within three (3) days, provide District with a complete written narrative response to District's request.

D. If the Contractor's revision is still not accepted by District, and the Contractor disagrees with District's position, the Contractor has seven (7) calendar days from receipt of District's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. The Contractor's failure to respond in writing within seven (7) calendar days of District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and the Contractor waives its rights to subsequently dispute or file a claim regarding District's position.

E. At District's discretion, the Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

1.11 RECOVERY SCHEDULE

A. If the Schedule Update shows a completion date twenty-one (21) calendar days beyond the Contract Completion Date, or individual milestone completion dates, the Contractor shall submit to District the proposed revisions to recover the lost time within seven (7) calendar days. As part of this submittal, the Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.

B. The revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District.

C. If the Contractor's revisions are not accepted by District, District and the Contractor shall follow the procedures in paragraph 1.09.C, 1.09.D and 1.09.E above.

D. At District's discretion, the Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

1.12 TIME IMPACT EVALUATION ("TIE") FOR CHANGE ORDERS, AND OTHER DELAYS

A. When Contractor is directed to proceed with changed Work, the Contractor shall prepare and submit within fourteen (14) calendar days from the Notice to Proceed a TIE which includes both a written narrative and a schedule diagram depicting how the changed Work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed Work in the schedule and how it impacts the current schedule-update critical path. The Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable District to evaluate the impact of changed Work to the scheduled critical path.

B. Contractor shall be required to comply with the requirements of Paragraph 1.09.A for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.

C. Contractor shall be responsible for all costs associated with the preparation of TIEs, and the process of incorporating them into the current schedule update. The Contractor shall provide District with four (4) copies of each TIE.

D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and the Contractor may submit a claim for additional time claimed by contractor.

1.13 TIME EXTENSIONS

A. The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accord with the General Conditions.

B. Where an event for which District is responsible impacts the projected Completion Date, the Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment, and material the Contractor would expend to mitigate District-caused time impact. The Contractor shall submit its mitigation plan to District within fourteen (14) calendar days from the date of discovery of the impact. The Contractor is responsible for the cost to prepare the mitigation plan.

C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.

D. No time will be granted under this Contract for cumulative effect of changes.

E. District will not be obligated to consider any time extension request unless the Contractor complies with the requirements of Contract Documents.

F. Failure of the Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.

G. If the Contractor does not submit a TIE within the required fourteen (14) calendar days for any issue, it is mutually agreed that the Contractor does not require a time extension for said issue.

1.14 SCHEDULE REPORTS

A. Submit four (4) copies of the following reports with the Initial CPM Schedule, the Original CPM Schedule, and each monthly update.

B. Required Reports:

(1) Two activity listing reports: one sorted by activity number and one by total Project Float. These reports shall also include each activity's early/late and actual start and finish dates, original and remaining duration, Project Float, responsibility code, and the logic relationship of activities.

(2) Cost report sorted by activity number including each activity's associated cost, percentage of Work accomplished, earned value- to date, previous payments, and amount earned for current update period.

(3) Schedule plots presenting time-scaled network diagram showing activities and their relationships with the controlling operations or critical path clearly highlighted.

(4) Cash flow report calculated by early start, late start, and indicating actual progress. Provide an exhibit depicting this information in graphic form.

(5) Planned versus actual resource (i.e., labor) histogram calculated by early start and late start.

C. Other Reports:

In addition to above reports, District may request, from month to month, any two of the following reports. Submit four (4) copies of all reports.

(1) Activities by early start.

(2) Activities by late start.

(3) Activities grouped by Subcontractors or selected trades.

(4) Activities with scheduled early start dates in a given time frame, such as fifteen (15) or thirty (30) day outlook.

D. Furnish District with report files on compact disks containing all schedule files for each report generated.

1.15 PROJECT STATUS REPORTING

A. In addition to submittal requirements for CPM scheduling identified in this Section, Contractor shall provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each CPM Schedule as specified herein. Status reporting shall be in form specified below.

B. Contractor shall prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:

(1) Status of major Project components (percent (%) complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.

(2) Progress made on critical activities indicated on CPM Schedule.

(3) Explanations for any lack of work on critical path activities planned to be performed during last month.

(4) Explanations for any schedule changes, including changes to logic or to activity durations.

(5) List of critical activities scheduled to be performed next month.

(6) Status of major material and equipment procurement.

(7) Any delays encountered during reporting period.

(8) Contractor shall provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.

(a) Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in computer-generated monthly and weekly printed reports.

(b) Contractor shall explain all variances and mitigation measures.

(9) Contractor may include any other information pertinent to status of Project. Contractor shall include additional status information requested by District at no additional cost.

(10) Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.

1.16 WEEKLY SCHEDULE REPORT

At the Weekly Progress Meeting, the Contractor shall provide and present a time-scaled three (3) week look-ahead schedule that is based and correlated by activity number to the current schedule (i.e., Initial, Original CPM, or Schedule Update).

1.17 DAILY CONSTRUCTION REPORTS

On a daily basis, Contractor shall submit a daily activity report to District for each workday, including weekends and holidays when worked. Contractor shall develop the daily construction reports on a computer-generated database capable of sorting daily Work, manpower, and man-hours by Contractor, Subcontractor, area, sub-area, and Change Order Work. Upon request of District, furnish computer disk of this data base. Obtain District's written approval of daily construction report data base format prior to implementation. Include in report:

A. Project name and Project number.

B. Contractor's name and address.

C. Weather, temperature, and any unusual site conditions.

D. Brief description and location of the day's scheduled activities and any special problems and accidents, including Work of Subcontractors. Descriptions shall be referenced to CPM scheduled activities.

E. Worker quantities for its own Work force and for Subcontractors of any tier.

F. Equipment, other than hand tools, utilized by Contractor and Subcontractors.

1.18 PERIODIC VERIFIED REPORTS

Contractor shall complete and verify construction reports on a form prescribed by the Division of the State Architect and file reports on the first day of February, May, August, and November during the preceding quarter year; at the completion of the Contract; at the completion of the Work; at the suspension of Work for a period of more than one (1) month; whenever the services of Contractor or any of Contractor's Subcontractors are terminated for any reason; and at any time a special verified report is required by the Division of the State Architect. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 33 00

SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Contractor's Submittals and Schedules, Drawings and Specifications;

B. Special Conditions.

1.02 SECTION INCLUDES:

A. Definitions:

(1) Shop Drawings and Product Data are as indicated in the General Conditions and include, but are not limited to, fabrication, erection, layout and setting drawings, formwork and falsework drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. In addition, there are other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment or systems and all positions conform to the requirement of the Contract Documents, including, without limitation, the Drawings.

(2) "Manufactured" applies to standard units usually mass-produced; "fabricated" means specifically assembled or made out of selected materials to meet design requirements. Shop Drawings shall establish the actual detail of manufactured or fabricated items, indicated proper relation to adjoining work and amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure.

(3) Manufacturer's Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed, at a minimum, in accordance with a specified product manufacturer's instructions, the Contractor shall procure and distribute copies of these to the District, the Architect, and all other concerned parties and shall furnish, install, or perform the work, at a minimum, in accordance with those instructions.

B. Samples, Shop Drawings, Product Data, and other items as specified, in accordance with the following requirements:

(1) Contractor shall submit all Shop Drawings, Product Data, and Samples to the District, the Architect, the Project Inspector, and the Construction Manager.

(2) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall submit required information in sufficient time to permit proper consideration and action before ordering any materials or items represented by such Shop Drawings, Product Data, and/or Samples.

(3) Contractor shall allow sufficient time so that no delay occurs due to required lead time in ordering or delivery of any item to the Site. Contractor shall be responsible for any delay in progress of Work due to its failure to observe these requirements.

(4) Time for completion of Work shall not be extended on account of Contractor's failure to promptly submit Shop Drawings, Product Data, and/or Samples.

(5) Reference numbers on Shop Drawings shall have Architectural and/or Engineering Contract Drawings reference numbers for details, sections, and "cuts" shown on Shop Drawings. These reference numbers shall be in addition to any numbering system that Contractor chooses to use or has adopted as standard.

(6) When the magnitude or complexity of submittal material prevents a complete review within the stated time frame, Contractor shall make this submittal in increments to avoid extended delays.

(7) Contractor shall certify on submittals for review that submittals conform to Contract requirements. Also certify that Contractor-furnished equipment can be installed in allocated space. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Submittals shall not be used as a means of requesting a substitution.

(8) Unless specified otherwise, sampling, preparation of samples, and tests shall be in accordance with the latest standard of the American Society for Testing and Materials.

(9) Upon demand by Architect or District, Contractor shall submit samples of materials and/or articles for tests or examinations and consideration before Contractor incorporates same in Work. Contractor shall be solely responsible for delays due to sample(s) not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples that are of value after testing will remain the property of Contractor.

C. Submittal Schedule:

(1) Contractor shall prepare its proposed submittal schedule that is coordinated with the proposed construction schedule and submit both to the District within ten (10) days after the date of the Notice to Proceed. Contractor's proposed schedules shall become the Project Construction Schedule and the Project Submittal Schedule after each is approved by the District.

(2) Contractor is responsible for all lost time should the initial submittal be rejected, marked "revise and resubmit", etc.

(3) All Submittals shall be forwarded to the District by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those Submittals shall be forwarded to the District so as not to delay the Construction Schedule.

(4) Contractor may be assessed $100 a day for each day it is late in submitting a shop drawing or sample. No extensions of time will be granted to Trade Contractor or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the Schedule.

1.03 SHOP DRAWINGS:

A. Contractor shall submit one reproducible transparency and six (6) opaque reproductions. The District will review and return the reproducible copy and one (1) opaque reproduction to Contractor.

B. Before commencing installation of any Work, the Contractor shall submit and receive approval of all drawings, descriptive data, and material list(s) as required to accomplish Work.

C. Review of Shop Drawings is regarded as a service to assist Contractor and in all cases original Contract Documents shall take precedence as outlined under General Conditions.

D. No claim for extra time or payment shall be based on work shown on Shop Drawings unless the claim is (1) noted on Contractor's transmittal letter accompanying Shop Drawings and (2) Contractor has complied with all applicable provisions of the General Conditions, including, without limitation, provisions regarding changes and payment, and all required written approvals.

E. District shall not review Shop Drawings for quantities of materials or number of items supplied.

F. District's and/or Architect’s review of Shop Drawing will be general. District and/or Architect review does not relieve Contractor of responsibility for dimensions, accuracy, proper fitting, construction of Work, furnishing of materials, or Work required by Contract Documents and not indicated on Shop Drawings. The District’s and/or Architect’s review of Shop Drawings is not to be construed as approving departures from Contract Documents.

G. Review of Shop Drawings and Schedules does not relieve Contractor from responsibility for any aspect of those Drawings or Schedules that is a violation of local, County, State, or Federal laws, rules, ordinances, or rules and regulations of commissions, boards, or other authorities or utilities having jurisdiction.

H. Before submitting Shop Drawings for review, Contractor shall check Shop Drawings of its subcontractors for accuracy, and confirm that all Work

contiguous with and having bearing on other work shown on Shop Drawings is accurately drawn and in conformance with Contract Documents.

I. Submitted drawings and details must bear stamp of approval of Contractor:

(1) Stamp and signature shall clearly certify that Contractor has checked Shop Drawings for compliance with Drawings.

(2) If Contractor submits a Shop Drawing without an executed stamp of approval, or whenever it is evident (despite stamp) that Drawings have not been checked, the District and/or Architect will not consider them and will return them to the Contractor for revision and resubmission. In that event, it will be deemed that Contractor has not complied with this provision and Contractor shall bear risk of all delays to same extent as if it had not submitted any Shop Drawings or details.

J. Submission of Shop Drawings (in either original submission or when resubmitted with correction) constitutes evidence that Contractor has checked all information thereon and that it accepts and is willing to perform Work as shown.

K. Contractor shall pay for cost of any changes in construction due to improper checking and coordination. Contractor shall be responsible for all additional costs, including coordination. Contractor shall be responsible for costs incurred by itself, the District, the Architect, the Project Inspector, the Construction Manager, any other Subcontractor or contractor, etc., due to improperly checked and/or coordination of submittals.

L. Shop Drawings must clearly delineate the following information:

(1) Project name and address.

(2) Specification number and description.

(3) Architect's name and project number.

(4) Shop Drawing title, number, date, and scale.

(5) Names of Contractor, Subcontractor(s) and fabricator.

(6) Working and erection dimensions.

(7) Arrangements and sectional views.

(8) Necessary details, including complete information for making connections with other Work.

(9) Kinds of materials and finishes.

(10) Descriptive names of materials and equipment, classified item numbers, and locations at which materials or equipment are to be installed in the Work. Contractor shall use same reference identification(s) as shown on Contract Drawings.

M. Contractor shall prepare composite drawings and installation layouts when required to solve tight field conditions.

(1) Shop Drawings shall consist of dimensioned plans and elevations and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.

(2) Contractor shall coordinate these composite Shop Drawings and installation layouts in the field between itself and its Subcontractor(s) for proper relationship to the Work, the work of other trades, and the field conditions. The Contractor shall check and approve all submittal(s) before submitting them for final review.

1.04 PRODUCT DATA OR NON REPRODUCIBLE SUBMITTALS:

A. Contractor shall submit manufacturer's printed literature in original form. Any fading type of reproduction will not be accepted. Contract must submit a minimum of six (6) each, to the District. District shall return one (1) to the Contractor, who shall reproduce whatever additional copies it requires for distribution.

B. Contractor shall submit six (6) copies of a complete list of all major items of mechanical, plumbing, and electrical equipment and materials in accordance with the approved Submittal Schedule, except as required earlier to comply with the approved Construction Schedule. Other items specified are to be submitted prior to commencing Work. Contractor shall submit items of like kind at one time in a neat and orderly manner. Partial lists will not be acceptable.

C. Submittals shall include manufacturer's specifications, physical dimensions, and ratings of all equipment. Contractor shall furnish performance curves for all pumps and fans. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on sheet and superfluous information shall be crossed out. If highlighting is used, Contractor shall mark all copies.

D. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and supplemental information that may be requested.

E. Imported Materials Certification must be submitted at least ten (10) days before material is delivered.

1.05 SAMPLES:

A. Contractor shall submit for approval Samples as required and within the time frame in the Contract Documents. Materials such as concrete, mortar, etc., which require on-site testing will be obtained from Project Site.

B. Contractor shall submit four (4) samples except where greater or lesser number is specifically required by Contract Documents including, without limitation, the Specifications.

(1) Samples must be of sufficient size and quality to clearly illustrate functional characteristics, with integrally related parts and attachment devices.

(2) Samples must show full range of texture, color, and pattern.

C. Contractor shall make all Submittals, unless it has authorized Subcontractor(s) to submit and Contractor has notified the District in writing to this effect.

D. Samples to be shipped prepaid or hand-delivered to the District.

E. Contractor shall mark samples to show name of Project, name of Contractor submitting, Contract number and segment of Work where representative Sample will be used, all applicable Specifications Sections and documents, Contract Drawing Number and detail, and ASTM or FS reference, if applicable.

F. Contractor shall not deliver any material to Site prior to receipt of District's and/or Architect's completed written review and approval. Contractor shall furnish materials equal in every respect to approved Samples and execute Work in conformance therewith.

G. District's and/or Architect's review, acceptance, and/or approval of Sample(s) will not preclude rejections of any material upon discovery of defects in same prior to final acceptance of completed Work.

H. After a material has been approved, no change in brand or make will be permitted.

I. Contractor shall prepare its Submittal Schedule and submit Samples of materials requiring laboratory tests to specified laboratory for testing not less than ninety (90) days before such materials are required to be used in Work.

J. Samples which are rejected must be resubmitted promptly after notification of rejection and be marked "Resubmitted Sample" in addition to other information required.

K. Field Samples and Mock-Ups are to be removed by Contractor at District's direction:

(1) Size: As Specified.

(2) Furnish catalog numbers and similar data, as requested.

1.06 REVIEW AND RESUBMISSION REQUIREMENTS:

A. The District will arrange for review of Sample(s), Shop Drawing(s), Product Data, and other submittal(s) by appropriate reviewer and return to Contractor as provided below within twenty-one (21) days after receipt or within twenty-one (21) days after receipt of all related information necessary for such review, whichever is later.

B. One (1) copy of product or materials data will be returned to Contractor with the review status.

C. Samples to be incorporated into the Work will be returned to Contractor, together with a written notice designating the Sample with the appropriate review status and indicating errors discovered on review, if any. Other Samples will not be returned, but the same notice will be given with respect thereto, and that notice shall be considered a return of the Sample.

D. Contractor shall revise and resubmit any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) as required by the reviewer. Such resubmittals will be reviewed and returned in the same manner as original Sample(s), Shop Drawing(s), Product Data, and other submittal(s), within fourteen (14) days after receipt thereof or within fourteen (14) days after receipt of all related information necessary for such review. Such resubmittal shall not delay the Work.

E. Contractor may proceed with any of the Work covered by Sample(s), Shop Drawing(s), Product Data, and other submittal(s) upon its return if designated as no exception taken, or revise as noted, provided the Contractor proceeds in accordance with the District and/or the Architect's notes and comments.

F. Contractor shall not begin any of the work covered by a Sample(s), Shop Drawing(s), Product Data, and other submittal(s), designated as revise and resubmit or rejected, until a revision or correction thereof has been reviewed and returned to Contractor.

G. Sample(s), Shop Drawing(s), Product Data, and other submittal(s) designated as revise and resubmit or rejected and requiring resubmittal, shall be revised or corrected and resubmitted to the District no later than fourteen (14) days or a shorter period as required to comply with the approved Construction Schedule, after its return to Contractor.

H. Neither the review nor the lack of review of any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) shall waive any of the requirements of the Contract Documents, or relieve Contractor of any obligation thereunder.

I. District's and/or Architect's review of Shop Drawings does not relieve the Contractor of responsibility for any errors that may exist. Contractor is responsible for the dimensions and design of adequate connections and details and for satisfactory construction of all the Work.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 35 13.23

SITE STANDARDS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including without limitation, Site Access, Conditions, and Regulations;

B. Special Conditions;

C. Drug-Free Workplace Certification;

D. Tobacco-Free Environment Certification;

E. Criminal Background Investigation/Fingerprinting Certification;

F. Temporary Facilities and Controls.

1.02 REQUIREMENTS OF THE DISTRICT:

A. Drug-Free Schools and Safety Requirements:

(1) All school sites and other District Facilities have been declared "Drug-Free Zones." No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, or contractors are to use drugs on these sites.

(2) Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school-owned vehicles and vehicles owned by others while on District property. Contractor shall post: "Non-Smoking Area" in a highly visible location in each work area, staging area, and parking area. Contractor may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area is to be kept clean at all times.

(3) Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Contractor shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.

B. Language: Profanity or other unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students, staff, volunteers, parents or public will not be allowed.

C. Disturbing the Peace (Noise and Lighting):

(1) Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.

(2) The use of radios, etc., shall be controlled to keep all sound at a level that cannot be heard beyond the immediate area of use. District reserves the right to prohibit the use of radios at the Site, except for mobile phones or other handheld communication radios.

(3) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

D. Traffic:

(1) Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.

(2) All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.

(3) District shall designate a construction entry to the Site. If Contractor requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Contractor's expense.

(4) Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in softscape areas that could otherwise be damaged.

E. All of the above shall be observed and complied with by the Contractor and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 41 00

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Obtaining of Permits, Licenses and Registrations and Work to Comply with All Applicable Laws and Regulations;

B. Special Conditions; and

C. Quality Control.

1.02 DESCRIPTION:

This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.03 REQUIREMENTS OF REGULATORY AGENCIES:

A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction over the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Architect may request, including, without limitation, applicable portions of the California Code of Regulations ("CCR").

(1) California Building Standards Administrative Code, Part 1, Title 24, CCR.

(2) California Building Code (CBC), Part 2, Title 24, CCR; (International Building Code volumes 1-2 and California Amendments).

(3) California Electrical Code (CEC), Part 3, Title 24, CCR; (National Electrical Code and California Amendments).

(4) California Mechanical Code (CMC), Part 4, Title 24, CCR; (Uniform Mechanical Code and California Amendments).

(5) California Plumbing Code (CPC), Part 5, Title 24, CCR; (Uniform Plumbing Code and California Amendments).

(6) California Fire Code (CFC), Part 9, Title 24, CCR; (International Fire Code and California Amendments).

(7) California Green Building Standards Code (CALGreen), Part 11, Title 24, CCR.

(8) California Referenced Standards Code, Part 12, Title 24, CCR.

(9) State Fire Marshal Regulations, Public Safety, Title 19, CCR.

(10) Partial List of Applicable National Fire Protection Association (NFPA) Standards:

(a) NFPA 13 - Automatic Sprinkler System.

(b) NFPA 14 - Standpipes Systems.

(c) NFPA 17A - Wet Chemical System

(d) NFPA 24 - Private Fire Mains.

(e) (California Amended) NFPA 72 - National Fire Alarm Codes.

(f) NFPA 253 - Critical Radiant Flux of Floor Covering System.

(g) NFPA 2001 - Clean Agent Fire Extinguishing Systems.

(11) California Division of the State Architect interpretation of Regulations ("DSA IR"), including, without limitation:

(a) DSA IR A-6 — Construction Change Document Submittal and Approval Processes.

(b) DSA IR A-7 — Project Inspector Certification and Approval.

(c) DSA IR A-8 — Project Inspector and Assistant Inspector Duties and Performance.

(d) DSA IR A-12 — Assistant Inspector Approval.

(12) DSA Procedures ("DSA PR")

(a) DSA PR 13-01 – Construction Oversight Process

(b) DSA PR 13-02 – Project Certification Process

B. This Project shall be governed by applicable regulations, including, without limitation, the State of California's Administrative Regulations for the Division of the State Architect-Structural Safety (DSA/SS), Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:

(1) Test and testing laboratory per Section 4-335. District shall pay for the testing laboratory.

(2) Special inspections per Section 4-333(c).

(3) Deferred Approvals per section 4-317(g).

(4) Verified reports per Sections 4-336 & 4-343(c).

(5) Duties of the Architect & Engineers shall be per Sections 4-333(a) and 4-341.

(6) Duties of the Contractor shall be per Section 4-343.

(7) Duties of Project Inspector shall be per Section 4-334.

(8) Addenda and Construction Change Documents per Section 4-338.

Contractor shall keep and make available all applicable parts of the most current version of Title 24 referred to in the plans and specifications at the Site during construction.

C. Items of deferred approval shall be clearly marked on the first sheet of the Architect's and/or Engineer's approved Drawings. All items later submitted for approval shall be per Title 24 requirements to the DSA.

(1) Contractor shall submit the following to Architect for review and endorsement:

(a) Product information on proposed material/system supplier.

(b) Drawings, specifications, and calculations prepared, signed, and stamped by an architect or engineer licensed in the State of California for that portion of the Work.

(c) All other requirements as may be required by DSA.

(2) Cost of preparing and submitting documentation per DSA Deferred Approval requirements including required modifications to Drawings and Specifications, whether or not indicated in the Contract Documents, shall be borne by Contractor.

(3) Contractor shall not begin fabrication and installation of deferred approval items without first obtaining DSA approval of Drawings and Specifications.

(4) Schedule of Work Subject to DSA Deferred Approval: Window wall systems exceeding 10 feet in span.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 42 13

ABBREVIATIONS AND ACRONYMS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions including without limitation, Definitions;

B. Special Conditions.

1.02 DOCUMENT INCLUDES:

A. Abbreviations used throughout the Contract Documents.

B. Reference to a technical society, organization, or body is by abbreviation, as follows:

1.	AA	The Aluminum Association
2.	AASHTO	American Association of State Highway and Transportation Officials
3.	ABPA	Acoustical and Board Products Association
4.	ACI	American Concrete Institute
5.	AGA	American Gas Association
6.	AGC	Associated General Contractors of America
7.	AHC	Architectural Hardware Consultant
8.	AHRI	Air Conditioning, Heating, Refrigeration Institute
9.	AI	Asphalt Institute
10.	AIA	American Institute of Architects
11.	AISC	American Institute of Steel Construction
12.	AISI	American Iron and Steel Institute
13.	AMCA	Air Movement and Control Association
14.	ANSI	American National Standards Institute
15.	APA	APA – The Engineered Wood Association
16.	ASCE	American Society of Civil Engineers
17.	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
18.	ASME	American Society of Mechanical Engineers
19.	ASTM	American Society of Testing and Materials International
20.	AWPA	American Wood Protection Association
21.	AWPI	American Wood Preservers Institute
22.	AWS	American Welding Society
23.	AWSC	American Welding Society Code
24.	AWI	Architectural Woodwork Institute
25.	AWWA	American Water Works Association
26.	BIA	The Brick Industry Association

27.	CCR	California Code of Regulations
28.	CLFMI	Chain Link Fence Manufacturers Institute
29.	CRA	California Redwood Association
30.	CRSI	Concrete Reinforcing Steel Institute
31.	CS	Commercial Standards
32.	CSI	Construction Specifications Institute
33.	CTI	Cooling Technology Institute
34.	FGIA	Fenestration and Glazing Industry Alliance
35.	FGMA	Flat Glass Manufacturers' Association
36.	FIA	Factory Insurance Association
37.	FM	Factory Mutual Global
38.	FS/FED SPEC	Federal Specification
39.	FTI	Facing Title Institute
40.	GA	Gypsum Association
41.	IAPMO	International Association of Plumbing and Mechanical Officials
42.	ICC	International Code Council
43.	IEEE	Institute of Electrical and Electronics Engineers
44.	IES	Illuminating Engineering Society
45.	MCAC	Mason Contractors Association of California
46.	MIMA	Mineral Wool Insulation Manufacturers Association
47.	MLMA	Metal Lath Manufacturers Association
48.	MS/MIL SPEC	Military Specifications
49.	NAAMM	National Association of Architectural Metal Manufacturers
50.	NBHA	National Builders Hardware Association
51.	NCMA	National Concrete Masonry Association
52.	NCSEA	National Council of Structural Engineers Associations
53.	NEC	National Electrical Code
54.	NEMA	National Electrical Manufacturers Association
55.	NIST	National Institute of Standards and Technology
56.	NSI	Natural Stone Institute
57.	NTMA	National Terrazzo and Mosaic Association, Inc.
58.	ORS	Office of Regulatory Services (California)
59.	OSHA	Occupational Safety and Health Act
60.	PCI	Precast/Prestressed Concrete Institute
61.	PCA	Portland Cement Association
62.	PCA	Painting Contractors Association
63.	PDI	Plumbing Drainage Institute
64.	PEI	Porcelain Enamel Institute, Inc.
65.	PG&E	Pacific Gas & Electric Company
66.	PS	Product Standards
67.	SDI	Steel Door Institute; Steel Deck Institute
68.	SJI	Steel Joist Institute
69.	SSPC	Society for Protective Coatings
70.	TCNA	Tile Council of North America, Inc.
71.	TPI	Truss Plate Institute
72.	UBC	Uniform Building Code
73.	UL	Underwriters Laboratories Code

74.	UMC	Uniform Mechanical Code
75.	USDA	United States Department of Agriculture
76.	VI	Vermiculite Institute
77.	WCLIB	West Coast Lumber Inspection Bureau
78.	WDMA	Window and Door Manufacturers Association
79.	WEUSER	Western Electric Utilities Service Engineering Requirements
80.	WIC	Woodwork Institute of California

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 42 16

DEFINITIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions including without limitation, Definitions;

B. Special Conditions.

1.02 QUALITY ASSURANCE

A. For products or workmanship specified by association, trade, or Federal Standards, Contractor shall comply with requirements of the standard, except when more rigid requirements are specified in the Contract Documents, or are required by applicable codes.

B. Contractor shall conform to current reference standard publication date in effect on the date of bid opening.

C. Contractor shall obtain copies of standards unless specifically required not to by the Contract Documents.

D. Contractor shall maintain a copy of all standards at jobsite during submittals, planning, and progress of the specific Work, until final completion, unless specifically required not to by the Contract Documents.

E. Should specified reference standards conflict with Contract Documents, Contractor shall request clarification from the District and/or the Architect before proceeding.

F. The contractual relationship of the parties to the Contract shall not be altered from the contractual relationship as indicated in the Contract Documents by mention or inference otherwise in any referenced document.

G. Governing Codes shall be as shown in the Contract Documents including, without limitation, the Specifications.

END OF DOCUMENT

DOCUMENT 01 42 19

REFERENCES

PART 1 - GENERAL

1.01 SCHEDULE OF REFERENCES:

The following information is intended only for the general assistance of the Contractor, and the District does not represent that all of the information is current. It is the Contractor's responsibility to verify the correct information for each of the entities listed.

AA	The Aluminum Association 1400 Crystal Drive, Suite 430 Arlington, VA 22202 www.aluminum.org	703/358-2960
AABC	Associated Air Balance Council 2401 Pennsylvania Avenue NW, Suite 330 Washington, DC 20037 www.aabc.com	202/737-0202
AASHTO	American Association of State Highway and Transportation Officials 555 12th St. NW - Suite 1000 Washington, DC 20004 www.transportation.org	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215Research Triangle Park, NC 27709-2215 www.aatcc.org	919/549-8141
ACA	American Coatings Association 901 New York Ave., NW, Suite 300 West Washington, DC 20001 www.paint.org	202/462-6272
ACI	American Concrete Institute 38800 Country Club Dr. Farmington Hills, MI 48331-3439 www.concrete.org	248/848-3800
ACPA	American Concrete Pipe Association 5605 N. MacArthur Blvd., Suite 340 Irving, TX 75038 www.concrete-pipe.org	972/506-7216

ADC	Air Duct Council 1901 N. Roselle Road, Suite 800 Schaumburg, IL 60195 www.flexibleduct.org	847/706-6750
AF&PA	American Forest and Paper Association 1101 K Street, NW, Suite 700 Washington, DC 20005 www.afandpa.org	202/463-2700
AGA	American Gas Association 400 North Capitol Street, NW, Suite 450 Washington, DC 20001 www.aga.org	202/824-7000
AGC	Associate General Contractors of America 2300 Wilson Blvd., Suite 300 Arlington, VA 22201 www.agc.org	703/548-3118
AHA	American Hardboard Association 1210 West Northwest Highway Palatine, IL 60067 http://domensino.com/AHA/default.htm	847/934-8800
AI	Asphalt Institute 2696 Research Park Drive Lexington, KY 40511-8480 www.asphaltinstitute.org	859/288-4960
AIA	The American Institute of Architects 1735 New York Ave., NW Washington, DC 20006-5292 www.aia.org	202/626-7300
AISC	American Institute of Steel Construction 130 East Randolph Street, Suite 2000 Chicago, IL 60601 www.aisc.org	312.670.2400
AISI	American Iron and Steel Institute 25 Massachusetts Ave., NW, Suite 800 Washington, DC 20001 www.steel.org	202/452-7100
AITC	American Institute of Timber Construction 1010 South 336th Street, #210 Federal Way, WA 98003-7394 https://www.plib.org/aitc/	253/835-3344

ALI	Associated Laboratories, Inc. P.O. Box 152837 Dallas, TX 75315 www.assoc-labs.com	214/565-0593
ALSC	American Lumber Standards Committee, Inc. 7470 New Technology Way, Suite F Frederick, MD 21703 www.alsc.org	301/972-1700
AMCA	Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, IL 60004 www.amca.org	847/394-0150
AMPP (formerly SSPC)	Association for Materials Protection and Performance (merger of Society for Protective Coatings and National Association of Corrosion Engineers International) (formerly Steel Structures Painting Council) 800 Trumbull Drive Pittsburgh, PA 15205 www.sspc.org	412/281-2331 877/281-7772
ANLA	AmericanHort (merger of American Nursery & Landscape Association and OFA – The Association of Horticultural Professionals) 2130 Stella Court Columbus, OH 43215 www.americanhort.org	614/487-1117
ANSI	American National Standards Institute 1899 L Street, NW, 11th Floor Washington, DC 20036 www.ansi.org	202/293-8020
APA	APA-The Engineered Wood Association 7011 S. 19th Street Tacoma, WA 98466-5333 www.apawood.org	253/565-6600

APA	Architectural Precast Association 325 John Knox Rd, Suite L-103 Tallahassee, FL 32303 www.archprecast.org	850/205-5637
APCIA	American Property Casualty Insurance Association (merger of American Insurance Association (formerly the National Board of Fire Underwriters) with the Property Casualty Insurers Association of America) 555 12th St, NW, Suite 550 Washington DC 20004 www.apci.org	202/828-7100
AHRI	Air Conditioning and Refrigeration Institute (now Air-Conditioning, Heating, & Refrigeration Institute) 2311 Wilson Blvd, Suite 400 Arlington, VA 22201 www.ahrinet.org	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association 2331 Rock Spring Road Forest Hill, MD 21050 www.asphaltroofing.org	443/640-1075
ASA	The Acoustical Society of America Suite 300 1305 Walt Whitman Road Melville, NY 11747-4300 https://acousticalsociety.org/	516/576-2360
ASCE	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 www.asce.org	800/548-2723 703/295-6300
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 180 Technology Parkway Peachtree Corners, GA 30092 www.ashrae.org	800/527-4723 404/636-8400
ASLA	American Society of Landscape Architects 636 Eye Street, NW Washington, DC 20001-3736 www.asla.org	202/898-2444
ASME	American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990 www.asme.org	800/834-2763

ASPE	American Society of Plumbing Engineers 6400 Shafer Court, Suite 350 Rosemont, IL 60018 http://aspe.org	847/296-0002
ASQ	American Society for Quality P.O. Box 3005 Milwaukee, WI 53201-3005 or 600 North Plankinton Avenue Milwaukee, WI 53203 http://asq.org	800/248-1946 414/272-8575
ASSE	American Society of Sanitary Engineering 18927 Hickory Creek Dr., Suite 220 Mokena, IL 60448 www.asse-plumbing.org	708/995-3019
ASTM	ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA, 19428-2959 www.astm.org	610/832-9500
AWCI	Association of the Wall and Ceiling Industry 513 West Broad Street, Suite 210 Falls Church, VA 22046 www.awci.org	703/538-1600
AWPA	American Wood Protection Association (formerly American Wood Preservers Institute) P.O. Box 361784 Birmingham, AL 35236-1784 www.awpa.com	205/733-4077
AWS	American Welding Society 8669 NW 36 Street, Suite 130 Miami, FL 33166 www.aws.org	800/443-9353 305/443-9353
AWI	Architectural Woodwork Institute 46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165-5874 www.awinet.org	571/323-3636
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 www.awwa.org	800/926-7337 303/794-7711

BHMA	Builders Hardware Manufacturers Association 355 Lexington Avenue, 15th Floor New York, NY 10017 www.buildershardware.com	212/297-2122
BIA	The Brick Industry Association 12007 Sunrise Valley Drive, Suite 430 Reston, VA 20191 www.gobrick.com	703/620-0010
CGA	Compressed Gas Association 8484 Westpark Drive, Suite 220 McLean, VA 22102 www.cganet.com	703/788-2700
CISCA	Ceilings & Interior Systems Construction Association 1010 Jorie Blvd, Suite 30 Oak Brook, IL 60523 www.cisca.org	630/584-1919
CISPI	Cast Iron Soil Pipe Institute 2401 Fieldcrest Dr. Mundelein, IL 60060 www.cispi.org	224/864-2910
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046 chainlinkinfo.org	301/596-2583
CPA	Composite Panel Association 19465 Deerfield Avenue, Suite 306 Leesburg, VA 20176 www.compositepanel.org	703/724-1128
CPSC	Consumer Product Safety Commission 4330 East-West Highway Bethesda, MD 20814 www.cpsc.gov	800/638-2772
CRA	California Redwood Association 818 Grayson Road, Suite 201 Pleasant Hill, CA 94523 www.calredwood.org	925/935-1499

CRI	Carpet and Rug Institute 100 S. Hamilton Street Dalton, GA 30722-2048 www.carpet-rug.org	706/278-3176
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173-4758 www.crsi.org	847/517-1200
CSI	The Construction Specifications Institute 123 North Pitt St, Suite 450 Alexandria, VA 22314 www.csinet.org	800/689-2900
CTIOA	Ceramic Tile Institute of America 12061 Jefferson Blvd. Culver City, CA 90230-6219 www.ctioa.org	310/574-7800
DHA	Decorative Hardwoods Association (formerly Hardwood Plywood & Veneer Association) 42777 Trade West Dr. Sterling, VA 20166 https://www.decorativehardwoods.org/	703/435-2900
DHI	Door and Hardware Institute (formerly National Builders Hardware Association) 2001 K Street NW, 3rd Floor North Washington, DC 20006 www.dhi.org	202/367-1134
DIPRA	Ductile Iron Pipe Research Association P.O. Box 190306 Birmingham, AL 35219 www.dipra.org	205/402-8700
DOC	U.S. Department of Commerce 1401 Constitution Ave., NW Washington, DC 20230 www.commerce.gov	202/482-2000
DOT	U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590 www.dot.gov	855/368-4200
EJMA	Expansion Joint Manufacturers Association, Inc. 25 North Broadway Tarrytown, NY 10591 www.ejma.org	914/332-0040

EPA	Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 www.epa.gov	202/272-0167
FCICA	Floor Covering Installation Contractors Association 800 Roosevelt Rd., Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.fcica.com	630/672-3702
FGIA	Fenestration and Glazing Industry Alliance 1900 E Golf Rd, Suite 1250 Schaumburg, IL 60173 https://fgiaonline.org/	847/303-5664
FM Global	Factory Mutual Insurance Company Amy Daley Global Practice Leader – Education, Public Entities, Health Care FM Global 270 Central Avenue Johnston, RI 02919-4949 www.fmglobal.com	401/275-3000 401/275-3029
FS	General Services Administration (GSA) Index of Federal Specifications, Standards and Commercial Item Descriptions 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407 www.gsa.gov	202/619-8925
GA	The Gypsum Association 962 Wayne Ave., Suite 620 Silver Spring, MD 20910 www.gypsum.org	301/277-8686
HMA	Hardwood Manufacturers Association One Williamsburg Place, Suite 108 Warrendale, PA 15086 http://hmamembers.org	412/244-0440

IAPMO	International Association of Plumbing and Mechanical Officials (formerly the Western Plumbing Officials Association) 4755 E. Philadelphia St. Ontario, CA 91761 www.iapmo.org	909/472-4100
ICC	International Code Council 500 New Jersey Avenue, NW, 6th Floor Washington, DC 20001 www.iccsafe.org	888/422-7233
IEEE	Institute of Electrical and Electronics Engineers 3 Park Avenue, 17th Floor New York, NY 10016-5997 www.ieee.org	212/419-7900
IES	Illuminating Engineering Society 120 Wall Street, Floor 17 New York, NY 10005-4001 www.ies.org	212/248-5000
ITRK	Intertek Testing Services 3933 US Route 11 Cortland, NY 13045 www.intertek.com	607/753-6711
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850 www.mcaa.org	301/869-5800
MMPA (formerly WMMPA)	Moulding & Millwork Producers Association (formerly Wood Moulding & Millwork Producers Association) 507 First Street Woodland, CA 95695 www.wmmpa.com	530/661-9591 800/550-7889
MSS	Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry, Inc. 127 Park Street, NE Vienna, VA 22180-4602 http://mss-hq.org	703/281-6613
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Rd. Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.naamm.org	630/942-6591

NAIMA	North American Insulation Manufacturers Association P.O. Box 1906 Alexandria, VA 22313 https://insulationinstitute.org/	703/684-0084
NALP	National Association of Landscape Professionals (formerly Professional Landcare Network) 12500 Fair Lakes Circle, Suite 200 Fairfax, VA 22033 https://www.landscapeprofessionals.org/	703/736-9666
NAPA	National Asphalt Pavement Association 6406 Ivy Lane, Suite 350 Greenbelt, MD 20770-1441 www.asphaltpavement.org	888/468-6499 301/731-4748
NCSPA	National Corrugated Steel Pipe Association 14070 Proton Road, Suite 100 Dallas, TX 75244 www.ncspa.org	972/850-1907
NCMA	National Concrete Masonry Association 13750 Sunrise Valley Drive Herndon, VA 20171-4662 www.ncma.org	703/713-1900
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877 www.nebb.org	301/977-3698
NECA	National Electrical Contractors Association 1201 Pennsylvania Ave. NW Washington, D.C., 20004 www.necanet.org	202/991-6300
NEMA	National Electrical Manufacturers Association 1300 North 17th Street N, Suite 900 Rosslyn, VA 22209 www.nema.org	703/841-3200
NEII	National Elevator Industry, Inc. 5537 SW Urish Road Topeka, KS 66610 https://nationalelevatorindustry.org/	703/589-9985
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA02169-7471 www.nfpa.org	800/344-3555 855/274-8525

NGA (formerly GANA)	National Glass Association (merged with Glass Association of North America) 1945 Old Gallows Road Suite 750 Vienna, VA 22182 www.glass.org	866/342-5642 Ext 127
NHLA	National Hardwood Lumber Association PO Box 34518 Memphis, TN 38184 www.nhla.com	901/377-1818
NIA	National Insulation Association 516 Herndon Pkwy., Ste. D Herndon, VA 20170 www.insulation.org	703/464-6422
NRCA	National Roofing Contractors Association 10255 W. Higgins Road, Suite 600 Rosemont, IL 60018-5607 www.nrca.net	847/299-9070
NSF	NSF International 789 N. Dixboro Road Ann Arbor, MI 48113-0140 www.nsf.org	800/673-6275 734/769-8010
NSI	Natural Stone Institute (formerly Marble Institute of America) 380 E. Lorain St. Oberlin, OH 44074 https://www.naturalstoneinstitute.org/	440/250-9222
NTMA	National Terrazzo and Mosaic Association 209 N. Crockett Street, Suite 2 PO Box 2605 Fredericksburg, TX 78624 www.ntma.com	800/323-9736
OSHA	Occupational Safety and Health Act U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW Washington, DC 20210 www.osha.gov	800/321-OSHA (6742)

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 or 200 Massachusetts Ave NW, Suite 200 Washington, DC 20001 www.cement.org	847/966-6200 202/408-9494
PCA	Painting Contractors Association (formerly Painting and Decorating Contractors of America) 2316 Millpark Drive Maryland Heights, MO 63043 https://www.pcapainted.org/	800/322-7322
PCI	Precast/Prestressed Concrete Institute 8770 W. Bryn Mawr Ave., Suite 1150 Chicago, IL 60631 www.pci.org	312/786-0300
PDI	Plumbing & Drainage Institute 800 Turnpike Street, Suite 300 North Andover, MA 01845 http://pdionline.org	978/557-0720 800/589-8956
PEI	Porcelain Enamel Institute, Inc. P.O. Box 920220 Norcross, GA 30010 www.porcelainenamel.com	770/676-9366
PG&E	Pacific Gas & Electric Company P.O. Box 997300 Sacramento, CA 95899-7300 www.pge.com	800/743-5000
PLIB	Pacific Lumber Inspection Bureau (formerly West Coast Lumber Inspection Bureau) 1010 South 336th Street, Suite 210 Federal Way, WA 98003-7394 https://www.plib.org/	253/835-3344
RFCI	Resilient Floor Covering Institute 115 Broad Street, Suite 201 La Grange, GA 30240 www.rfci.com	706/882-3833
SDI	Steel Deck Institute P.O. Box 426 Glenshaw, PA 15116 www.sdi.org	412/487-3325

SDI	Steel Door Institute 30200 Detroit Road Westlake, OH 44145 www.steeldoor.org	440/899-0010
SJI	Steel Joist Institute 140 West Evans Street, Suite 203 Florence, SC 29501 http://steeljoist.org	843/407-4091
SMA	Stucco Manufacturers Association 5753 E Santa Ana Cyn Rd, #G-156 Anaheim, CA 92807 www.stuccomfgassoc.com	714/473-9579
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 4201 Lafayette Center Drive Chantilly, VA 20151-1219 www.smacna.org	703/803-2980
SPI	SPI: The Plastics Industry Trade Association, Inc. 1425 K St. NW, Suite 500 Washington, DC 20005 www.plasticsindustry.org	202/974-5200
TCA	The Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 www.tcnatile.com	864/646-8453
TPI	Truss Plate Institute 2670 Crain Highway, Suite 203 Waldorf, MD 20601 www.tpinst.org	240/587-5582
TPI	Turfgrass Producers International 444 E. Roosevelt Road #346 Lombard, IL 60148 www.turfgrasssod.org	800/405-8873 847/649-5555
TCIA	Tree Care Industry Association (formerly the National Arborist Association) 670 N Commercial Street, Suite 201 Manchester, NH 03101 www.tcia.org	603/314-5380 800/733-2622

TVI	The Vermiculite Institute c/o The Schundler Company 10 Central Street Nahant, MA 01908 www.vermiculiteinstitute.org	732/287-2244
UL	Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 www.ul.com	847/272-8800 877/854-3577
UNI	Uni-Bell PVC Pipe Association 201 E. John Carpenter Freeway, Suite 750 Irving, TX 75062 www.uni-bell.org	972/243-3902
USDA	U.S. Department of Agriculture 1400 Independence Ave., S.W. Washington, DC 20250 www.usda.gov	202/720-2791
WA	Wallcoverings Association 35 E Wacker Dr., Suite 850 Chicago, IL 60601 www.wallcoverings.org	312/224-2574
WCMA	Window Covering Manufacturers Association 355 Lexington Avenue 15th Floor New York, NY 10017 www.wcmanet.org	212/297-2122
WDMA	Window & Door Manufacturers Association 2001 K Street NW, 3rd Floor North Washington, D.C. 20006 www.wdma.com	202/367-1157
WI	Woodwork Institute 1455 Response Road, Suite 110 Sacramento, CA 95815 www.wicnet.org	916/372-9943
WRI	Wire Reinforcement Institute 942 Main Street, Suite 300 Hartford, CT 06103 www.wirereinforcementinstitute.org	860/240-9545
WWCA	Western Wall & Ceiling Contractors Association 1910 N. Lime St. Orange, CA 92865 www.wwcca.org	714/221-5520

WWPA	Western Wood Products Association (formerly Redwood Inspection Service) 1500 SW First Ave., Suite 870 Portland, OR 97201 www.wwpa.org	503/224-3930

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 43 00

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Purchase of Materials and Equipment;

B. Special Conditions;

C. Imported Materials Certification.

1.02 MATERIAL AND EQUIPMENT

A. Only items approved by the District and/or Design Professional shall be used.

B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.03 MATERIAL AND EQUIPMENT COLORS

A. The District and/or Architect will provide a schedule of colors.

B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.

B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.

C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.

D. Materials are not acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.

E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, access to the Site or buildings, and underground services. Contractor shall protect material and equipment furnished under Contract.

F. Contractor may store materials on Site with prior written approval by the District, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at a bonded warehouse and with appropriate insurance coverage at no cost to District.

G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.

B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

2.02 FACILITIES AND EQUIPMENT

Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.

2.03 MATERIAL REFERENCE STANDARDS

Where material is specified solely by reference to "standard specifications" and if requested by District, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

PART 3 - EXECUTION

3.01 WORKMANSHIP

A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).

B. Work shall be executed by tradespersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

3.02 COORDINATION

A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.

B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

3.03 COMPLETENESS

Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar," should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

3.04 APPROVED INSTALLER OR APPLICATOR

Installation by a manufacturer's approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator who does not have other approved applicator work in progress or completed is not approved for this Project.

3.05 MANUFACTURER'S RECOMMENDATIONS

All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Architect.

END OF DOCUMENT

DOCUMENT 01 45 00

QUALITY CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Inspector, Inspections and Tests, Uncovering of Work and Non-conforming of Work and Correction of Work;

B. Special Conditions.

1.02 RELATED CODES:

A. The Work is governed by requirements of Title 24, California Code of Regulations ("CCR"), and the Contractor shall keep a copy of these available at the job Site for ready reference during construction.

B. The Division of the State Architect ("DSA") shall be notified at or before the start of construction.

1.03 OBSERVATION AND SUPERVISION:

A. The District and Architect or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Architect and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, CCR, Part 1, Title 24, Section 4-341.

B. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District, referred to hereinafter as the "Project Inspector", will observe the work in accordance with CCR, Part 1, Title 24, Sections 4-333(b) and 4-342:

(1) The Project Inspector and Special Inspector(s) shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections. The Contractor shall provide facilities and operation of equipment as needed, and access as required and shall provide assistance for sampling or measuring materials.

(2) The Project Inspector will notify the District and Architect and call the attention of the Contractor to any observed failure of Work or material to conform to Contract Documents.

(3) The Project Inspector shall observe and monitor all testing and inspection activities required.

The Contractor shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to CCR, Part 1, Title 24, Section 4-343. The Contractor shall supervise and direct the Work and maintain a competent superintendent on the job who is authorized to act in all matters pertaining to the Work. The Contractor's superintendent shall also inspect all materials, as they arrive, for compliance with the Contract Documents. Contractor shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Contractor shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by Part 1, Title 24, Section 4-336.

1.04 TESTING AGENCIES:

A. Testing agencies and tests shall be in conformance with the General Documents and the requirements of Part 1, Title 24, Section 4- 335.

B. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer, if any, referred to hereinafter as the "Soils Engineer."

C. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory, referred to hereinafter as the "Testing Laboratory." The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

1.05 TESTS AND INSPECTIONS:

A. The Contractor shall be responsible for notifying the District and Project Inspector of all required tests and inspections. Contractor shall notify the District and Project Inspector at least seventy-two hours (72) hours in advance of performing any Work requiring testing or inspection.

B. The Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.

C. The District will pay for first inspections and tests required by the "CCR", and other inspections or tests that the District and/or the Architect may direct to have made, including the following principal items:

(1) Tests and observations for earthwork and paving.

(2) Tests for concrete mix designs, including tests of trial batches.

(3) Tests and inspections for structural steel work.

(4) Field tests for framing lumber moisture content.

(5) Additional tests directed by the District that establish that materials and installation comply with the Contract Documents.

(6) Tests and observations of welding and expansion anchors.

D. The District may at its discretion, pay and then back charge the Contractor for:

(1) Retests or reinspections, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.

(2) Uncovering of work in accordance with Contract Documents.

(3) Testing done on weekends, holidays, and overtime will be chargeable to the Contractor for the overtime portion.

(4) Testing done off Site.

E. Testing and inspection reports and certifications:

(1) If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification.

(a) The District;

(b) The Construction Manager, if any;

(c) The Architect;

(d) The Consulting Engineer, if any;

(e) Other engineers on the Project, as appropriate;

(f) The Project Inspector; and

(g) The Contractor.

(2) When the test or inspection is one required by the CCR, a copy of the report shall also be provided to the DSA.

PART 2 - PRODUCTS

2.01 TYPE OF TESTS AND INSPECTIONS

A. Testing and inspection shall be in accordance with DSA Form 103 (or current version)

B. Slump Test
ASTM C 143

C. Concrete Tests

Testing agency shall test concrete used in the work per the following paragraphs:

(1) Compressive Strength:

(a) Minimum number of tests required: One (1) set of three (3) cylinders for each 100 cubic yards (Sec. 2604(h) 01) of concrete or major fraction thereof, placed in one (1) day. See Title 24, Section 2605(g).

(b) Two cylinders of each set shall be tested at twenty-eight (28) days. One (1) cylinder shall be held in reserve and tested only when directed by the Architect or District.

(c) Concrete shall test the minimum ultimate compressive strength in twenty-eight 28 days, as specified on the structural drawings.

(d) In the event that the twenty-eight (28) day test falls below the minimum specified strength, the effective concrete in place shall be tested by taking cores in accordance with UBC Standard No. 26-13 and tested as required for cylinders.

(e) In the event that the test on core specimens falls below the minimum specified strength, the concrete will be deemed defective and shall be removed and replaced upon such direction of the Architect, and in a manner acceptable to the Division of the State Architect.

D. Reinforcing, Steel

E. Structural Steel Per Title 24 and as noted: - Not Applicable

(1) Material: Steel per Table in Title 24, Section 2712.

(2) Qualification of Welders (UBC Std. 27-6).

(3) Shop fabrication (Section 2712(d). Structural steel only).

(4) Shop and field welding (Section 2712(e)).

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions;

C. Site Standards; and

D. Construction Waste Management and Disposal.

1.02 TEMPORARY UTILITIES:

A. Electric Power and Lighting:

(1) Contractor will pay for power during the course of the Work. To the extent power is available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver that power service from its existing location in the building(s) or on the Site to point of intended use.

(2) Contractor shall verify characteristics of power available in building(s) or on the Site. Contractor shall take all actions required to make modifications where power of higher voltage or different phases of current are required. Contractor shall be fully responsible for providing that service and shall pay all costs required therefor.

(3) Contractor shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.

(4) Contractor shall be responsible for maintaining existing lighting levels in the project vicinity should temporary outages or service interruptions occur.

B. Heat and Ventilation:

(1) Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to

protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.

(2) Contractor shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.

(3) Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

C. Water:

(1) Contractor shall pay for water used during the course of the Work. Contractor shall coordinate and pay for installation or use of water meter in compliance with local water agency requirements. To the extent water is then available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver such utility service from its existing location in the building(s), on the Site, or other location approved by the local water agency, to point of intended use.

(2) Contractor shall use backflow preventers on water lines at point of connection to District's water supply. Backflow preventers shall comply with requirements of Uniform Plumbing Code.

(3) Contractor shall make potable water available for human consumption.

D. Sanitary Facilities:

(1) Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the Inspector or Contractor completes all other work at the Site.

(2) Use of toilet facilities in the Work under construction shall not be permitted except by consent of the Inspector and the District.

E. Telephone Service:

(1) Contractor shall arrange with local telephone service company for telephone service as required for the performance of the Work. Contractor shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.

(2) Contractor shall pay the costs for telephone and fax lines installation, maintenance, service, and removal.

F. Fire Protection:

(1) Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.

(2) Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces.

G. Trash Removal:

(1) Contractor shall provide trash removal on a daily basis. Under no circumstance shall Contractor use District trash service.

H. Field Office:

(1) If Contractor chooses to provide a field office, it shall be an acceptable construction trailer that is well-lit and ventilated. The construction trailer shall be equipped with shelves, desks, filing cabinet, chairs, and such other items of equipment needed. Trailer and equipment are the property of the Contractor and must be removed from the Site upon completion of the Work. Contractor may use specific campus location for office area determined/approved by the District, and in writing by the District.

(2) Contractor shall provide any additional electric lighting and power required for the trailer. Contractor shall make adequate provisions for heating and cooling as required.

I. Temporary Facilities:

(1) Portable Toilets/Wash Station

1.03 CONSTRUCTION AIDS:

A. Plant and Equipment:

(1) Contractor shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workers. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.

(2) Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the District.

B. None of the District's tools and equipment shall be used by Contractor for the performance of the Work.

1.04 BARRIERS AND ENCLOSURES:

A. Contractor shall obtain the District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.

B. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises, the public, and workers. Contractor shall also protect the Work and existing facilities from the elements, and adjacent construction and improvements, persons, and trees and plants from damage and injury from demolition and construction operations.

C. Contractor shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.

D. Tree and Plant Protection:

(1) Contractor shall preserve and protect existing trees and plants on the Premises that are not designated or required to be removed, and those adjacent to the Premises.

(2) Contractor shall provide barriers to a minimum height of 4'-0" around drip line of each tree and plant, around each group of trees and plants, as applicable, in the proximity of demolition and construction operations, or as denoted on the Plans.

(3) Contractor shall not park trucks, store materials, perform Work or cross over landscaped areas. Contractor shall not dispose of paint thinners, water from cleaning, plastering or concrete operations, or other deleterious materials in landscaped areas, storm drain systems, or sewers. Plant materials damaged as a result of the performance of the Work shall, at the option of the District and at Contractor's expense, either be replaced with new plant materials equal in size to those damaged or by payment of an amount representing the value of the damaged materials as determined by the District.

(4) Contractor shall remove soil that has been contaminated during the performance of the Work by oil, solvents, and other materials which could be harmful to trees and plants, and replace with good soil, at Contractor's expense.

(5) Excavation around Trees:

(a) Excavation within drip lines of trees shall be done only where absolutely necessary and with written permission from the District.

(b) Where trenching for utilities is required within drip lines, tunneling under and around roots shall be by hand digging and shall be approved by the District. Main lateral roots and taproots shall not be cut. All roots 2 inches in diameter and

larger shall be tunneled under and heavily wrapped with wet burlap so as to prevent scarring or excessive drying. Smaller roots that interfere with installation of new work may be cut with prior approval by the District. Roots must first be cut with a Vermeer, or equivalent, root cutter prior to any trenching.

(c) Where excavation for new construction is required within drip line of trees, hand excavation shall be employed to minimize damage to root system. Roots shall be relocated in backfill areas wherever possible. If encountered immediately adjacent to location of new construction, roots shall be cut approximately 6 inches back from new construction.

(d) Approved excavations shall be carefully backfilled with the excavated materials approved for backfilling. Backfill shall conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities. Do not use mechanical equipment to compact backfill. Tamp carefully using hand tools, refilling and tamping until Final Acceptance as necessary to offset settlement.

(e) Exposed roots shall not be allowed to dry out before permanent backfill is placed. Temporary earth cover shall be provided, or roots shall be wrapped with four layers of wet, untreated burlap and temporarily supported and protected from damage until permanently relocated and covered with backfill.

(f) Accidentally broken roots should be sawed cleanly 3 inches behind ragged end.

1.05 SECURITY:

The Contractor shall be responsible for project security for materials, tools, equipment, supplies, and completed and partially completed Work.

1.06 TEMPORARY CONTROLS:

A. Noise Control:

(1) Contractor acknowledges that adjacent facilities may remain in operation during all or a portion of the Work period, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.

(2) Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to the District a minimum of forty-eight (48) hours in advance of their performance.

B. Noise and Vibration:

(1) Equipment and impact tools shall have intake and exhaust mufflers.

(2) Contractor shall cooperate with District to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

C. Dust and Dirt:

(1) Contractor shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.

(2) Contractor shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.

(3) Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.

(4) Contractor shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

D. Water:

(1) Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

E. Pollution:

(1) No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.

(2) Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

F. Lighting:

(1) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

1.07 JOB SIGN(S):

A. General:

(1) Contractor shall provide and maintain a Project identification sign with the design, text, and colors designated by the District and/or the Design Professional; locate sign as approved by the District.

(2) Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the District.

B. Materials:

(1) Structure and Framing: Structurally sound, new or used wood or metal; wood shall be nominal 3/4-inch exterior grade plywood.

(2) Sign Surface: Minimum 3/4-inch exterior grade plywood.

(3) Rough Hardware: Galvanized.

(4) Paint: Exterior quality, of type and colors selected by the District and/or the Design Professional.

C. Fabrication:

(1) Contractor shall fabricate to provide smooth, even surface for painting.

(2) Size: 4'-0" x 8'-0", unless otherwise indicated.

(3) Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: one coat of primer and one coat of finish paint.

(4) Text and Graphics: As indicated.

1.08 PUBLICITY RELEASES:

A. Contractor shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s) without the written permission of the District.

PART 2 – PRODUCTS Not used.

PART 3 – EXECUTION Not used.

END OF DOCUMENT

DOCUMENT 01 50 13

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions; and

C. Temporary Facilities and Controls.

1.02 SECTION INCLUDES:

A. Administrative and procedural requirements for the following:

(1) Salvaging non-hazardous construction waste.

(2) Recycling non-hazardous construction waste.

(3) Disposing of non-hazardous construction waste.

1.03 DEFINITIONS:

A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.

B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.

C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.

D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.

F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.04 PERFORMANCE REQUIREMENTS:

A. General: Develop waste management plan that results in end-of Project rates for salvage/recycling of sixty-five percent (65%) by weight (or by volume, but not a combination) of total waste generated by the Work.

1.05 SUBMITTALS:

A. Waste Management Plan: Submit waste management plan within 30 days of date established for commencement of the Work.

B. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit copies of report. Include the following information:

(1) Material category.

(2) Generation point of waste.

(3) Total quantity of waste in tons or cubic yards.

(4) Quantity of waste salvaged, both estimated and actual in tons or cubic yards.

(5) Quantity of waste recycled, both estimated and actual in tons or cubic yards.

(6) Total quantity of waste recovered (salvaged plus recycled) in tons or cubic yards.

(7) Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.

C. Waste Reduction Calculations: Before request for final payment, submit copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.

D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.

F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

H. Qualification Data: For Waste Management Coordinator.

I. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

J. Submittal procedures and quantities are specified in Document 01 33 00.

1.06 QUALITY ASSURANCE:

A. Waste Management Coordinator Qualifications: LEED Accredited Professional by U.S. Green Building Council.

B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

C. Waste Management Conference: Conduct conference at Project site to comply with requirements. Review methods and procedures related to waste management including, but not limited to, the following:

(1) Review and discuss waste management plan including responsibilities of Waste Management Coordinator.

(2) Review requirements for documenting quantities of each type of waste and its disposition.

(3) Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.

(4) Review procedures for periodic waste collection and transportation to recycling and disposal facilities.

(5) Review waste management requirements for each trade.

1.07 WASTE MANAGEMENT PLAN:

A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume, but use same units of measurement throughout waste management plan.

B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.

C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.

(1) Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.

(2) Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.

(3) Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.

(4) Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.

(5) Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.

(6) Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION

3.01 PLAN IMPLEMENTATION:

A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

(1) Comply with Document 01 50 00 for operation, termination, and removal requirements.

B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.

C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.

(1) Distribute waste management plan to everyone concerned within 3 days of submittal return.

(2) Distribute waste management plan to entities when they first begin work on site. Review plan procedures and locations established for salvage, recycling, and disposal.

D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

(1) Designate and label specific areas of Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

(2) Comply with Document 01 50 00 for controlling dust and dirt, environmental protection, and noise control.

3.02 RECYCLING CONSTRUCTION WASTE:

A. General: Recycle paper and beverage containers used by on-site workers.

B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to the Contractor.

C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.

(1) Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project Site. Include list of acceptable and unacceptable materials at each container and bin.

(a) Inspect containers and bins for contamination and remove contaminated materials if found.

(2) Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

(3) Stockpile materials away from construction area. Do not store within drip line of remaining trees.

(4) Store components off the ground and protect from the weather.

(5) Remove recyclable waste off District property and transport to recycling receiver or processor.

D. Packaging:

(1) Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.

(2) Polystyrene Packaging: Separate and bag material.

(3) Pallets: As much as possible, require deliveries using pallets to remove pallets from Project Site. For pallets that remain on Site, break down pallets into component wood pieces and comply with requirements for recycling wood.

(4) Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.

E. Site-Clearing Wastes: Chip brush, branches, and trees on site.

F. Wood Materials:

(1) Clean Cut-Offs of Lumber: Grind or chip into small pieces.

(2) Clean Sawdust: Bag sawdust that does not contain painted or treated wood.

G. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.

(1) Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.03 DISPOSAL OF WASTE:

A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project Site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

(1) Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on site.

(2) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn waste materials.

C. Disposal: Transport waste materials off District property and legally dispose of them.

END OF DOCUMENT

DOCUMENT 01 52 13

FIELD OFFICES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions; and

C. Temporary Facilities and Controls.

1.02 SECTION INCLUDES:

A. Requirements for Field Offices and Field Office Trailers.

1.03 SUMMARY:

A. General: Contractor shall provide District's Field Office Trailer and contents, for District's use exclusively, during the term of the Contract.

B. Property: Trailer, furniture, furnishings, equipment, and the like, supplied by the Contractor with the Office Trailer shall remain the property of the Contractor; District property items installed, delivered, and the like by District within the Office Trailer will remain District's property.

C. Modifications: District reserves the right to modify the trailer or contents, or both, as may be deemed proper by District.

D. Condition: Trailer and contents shall be clean, neat, substantially finished, in good, proper, and safe condition for use, operation, and the like; the trailer and contents shall not be required to be new.

E. Installation Timing: Provide safe, fully furnished, functional, proper, complete, and finished trailer properly ready for entire use, within fourteen (14) calendar days of District's notification of the issuance of Notice to Proceed.

1.04 SUBMITTALS:

A. General: Submit submittals to District in quantity, format, type, and the like, as specified herein.

B. Office Trailer Data: One (1) copy of manufacturer's descriptive data, technical descriptions, regulatory compliance, industry standards, installation, removal, and maintenance instructions.

C. Equipment Data: Two (2) copies of manufacturer data for each type of equipment, if directed by District.

D. Furniture and Furnishings Data: Two (2) copies of manufacturer data for each type of equipment, if directed by District.

E. Plans: One (1) reproducible copy of appropriately scaled plans of trailer layout. Plans shall include, but not be limited to: lighting; furniture; equipment; telephone and electrical outlets; and the like.

F. Product Samples: One (1) complete and entire unit of each type, if directed by District.

1.05 QUALITY ASSURANCE

A. Standards: In the event that provisions of codes, regulations, safety orders, Contract Documents, referenced manufacturer's specifications, manufacturer's instructions, industry standards, and the like, are in conflict, the more restrictive and higher quality shall govern.

B. Installer: Installer or Installers engaged by Contractor must have a minimum of five (5) years of documented and properly authenticated successful experience of specialization in the installation of the items or systems, or both, specified herein.

C. Manufacturer: Contractor shall obtain products from nationally and industry recognized Manufacturer with five (5) years minimum, of immediately recent, continuous, documented and properly authenticated successful experience of specialization in the manufacture of the product specified herein.

D. State Personnel Training: Provide proper training for maintenance and operations, including emergency procedures, and the like, as directed by District.

E. Units: Shall be sound and free of defects, and shall not include any damage or defect that will impair the safety, installation, performance, or the durability of the entire Office Trailer and appurtenant systems.

1.06 REGULATORY REQUIREMENTS

A. General: Work shall be executed in accordance with applicable Codes, Regulations, Statutes, Enactments, Rulings, Laws, each authority having jurisdiction, and including, but not limited to, Regulatory Requirements specified herein.

B. California Building Standards Code ("CBSC").

C. California Code of Regulations, Title 25, Chapter 3, Sub Chapter 2, Article 3 ("CCR").

D. Coach Insignia: Trailer shall display California Commercial Coach Insignia; such insignia shall be deemed to show that the trailer is in accordance with the Construction and Fire Safety requirements of CCR.

PART 2 – PRODUCTS

2.01 FIELD OFFICE TRAILER

A. General: Provide entire Field Office Trailer of type, function, operation, capacity, size, complete with controls, safety devices, accessories, and the like, for proper and durable installation. Partitions, walls, ceiling, and other interior and exterior surfaces shall be appropriately finished, including, but not limited to, trim, painting, wall base, floor covering, suspended or similar ceiling, and the like; provide systems, components, units, nuts, bolts, screws, anchoring devices, fastening devices, washers, accessories, adhesives, sealants, and other items of type, grade, and class required for the particular use, not identified but required for a complete, weather-tight, appropriately operating, and finished installation.

B. Manufacturers: General Electric Capital Modular Space; The Space Place, Inc.; or equal.

C. Program: Provide a wheel-mounted trailer with stairs, landings, platforms, ramps, and the like, in good, proper, safe, clean, and properly finished condition; with proper heavy duty locks, and other proper and effective security at all doors, windows, and the like. Trailer shall be maintained in good, proper, safe, clean, and properly finished condition during the Contract.

(1) Nominal Trailer Size: Four hundred eighty (480) square feet, minimum.

(2) Stairs, Platform: Properly finished stairs, platforms, and ramps.

(3) Doors: Two (2), three (3) foot wide exterior doors with locksets; finished ramp, steps, and entry platform at each exterior door.

(4) Keys: Submit five (5) keys for each door, window, furniture unit, and the like. There shall be no other key copies or originals available; each key shall be identified for District; and shall be labeled, or tagged or both, as directed by District.

(5) HVAC

(6) Lighting: Sixty-five (65) foot-candles illumination minimum at any point, at thirty (30) inches above finished floor throughout from fluorescent light source, exclusively, or as directed by District.

(7) Electrical Outlets: One (1) duplex outlet evenly spaced every twelve (12) linear horizontal feet of wall face, and electrical service ready for use.

(8) Telephones and Telephone Outlets: Two (2) telephone lines wired, connected to telephone utility service, and ready for use, and two (2) telephone instruments, each with two (2)-line capability, speed dial and hands-free feature. Locate each outlet as directed by District.

(9) Voicemail Messaging System or Answering Machine: One (1) unit, two (2)-line; digital.

2.02 FIELD OFFICE TRAILER ITEMS

A. General: Provide the Field Office Trailer with the following arranged into two (2) workstations:

(1) Desks: Two (2) desks: thirty-six (36) inches by sixty (60) inches; steel, laminated plastic top; locking, one (1) or two (2) file drawers single pedestal; steel; provide five (5) keys to District.

(2) Tables: Two (2) tables; thirty-six (36) inches by sixty (60) inches; twenty-nine (29) inches high; steel, laminated plastic top tables; one (1) at each desk.

(3) Chairs: Two (2) chairs: swivel; steel; with seat cushion and arms; one (1) at each desk.

(4) Waste Baskets: Two (2) waste baskets, one at each desk.

B. Furniture and Equipment: Provide in the space located to effect efficient and logical use.

(1) File cabinet: One (1); four (4) drawer; lateral; steel locking.

(2) Plan Table: One (1) plan table: thirty-six (36) inches deep by seventy-two (72) inches wide by forty-two (42) inches high; adjustable; wood or steel; with lockable plan and pencil drawers.

(3) Drafting Stool: One (1) drafting stool; swiveling; steel; padded; adjustable; with footrest and casters.

(4) Bookshelf: One (1) bookshelf: thirty-six (36) inches deep by seventy-two (72) inches wide by forty-two (42) inches high; adjustable; wood or steel; with lockable plan and pencil drawer.

(5) Plan Rack: One (1) wheel mounted plan rack.

(6) Waste Baskets: One (1) large waste basket.

(7) Coat/Hat Hanger: Wall mounted with minimum capacity for four (4) garments and ten (10) hats.

(8) Document Management System: Shall include an integrated high-volume printer, copier, and facsimile machine, including stand, base, and storage cabinet; and shall include the following features:

(a) Type: Laser, dry electrostatic transfer, plain paper, digital, multi-function imaging system.

(b) Network: Ethernet or Token Ring network ready, Plug-and-Play.

(c) Print, send/receive facsimile from any connected workstation.

(d) Resolution: Six hundred (600) dots per inch by six hundred (600) dots per inch, minimum.

(e) Print Speed: Twenty (20) pages per minute, minimum.

(f) Copies: Twenty (20) copies per minute, minimum.

(g) Document Handler: Forty (40) sheet, minimum

(h) Collator: Forty (40) bin, minimum, with stapling.

(i) Duplexing: Capable.

(j) Paper Size: Capable of handling paper sizes to eleven (11) inches by seventeen (17) inches.

(k) Paper Cassettes: One (1) each for eight and one half (8.5) inches by eleven (11) inches, eight and one half (8.5) inches by fourteen (14) inches, and eleven (11) inches by seventeen (17) inches paper sizes; minimum two hundred fifty (250) sheets per cassette.

(l) Reduction/Enlargement: Capable of reduction to twenty-five percent (25%) and enlargement to two hundred percent (200%).

(m) Facsimile Electronic Storage: Capable of storing minimum of fifty (50) speed dial numbers, group faxing and broadcast faxing.

(n) Facsimile Scanning: Capable of scanning into memory a minimum of one hundred (100) pages with maximum scan time of three (3) seconds per page.

(o) Halftone: Sixty-four (64) levels.

(p) Redial: Automatic and Manual.

(9) Maintenance: Contractor shall purchase service agreements for each unit of equipment for the duration of the project plus two (2) months, and shall maintain all equipment in proper working condition. Service agreements shall include provision for replacement of toner cartridges and other items required to effect proper unit use. Service agreements shall also provide for:

(a) Unlimited Service Calls.

(b) Same Day Response.

(c) All parts, labor, preventative maintenance and mileage.

(d) All chemicals, such as toner, fixing agent, and the like.

(e) System training and setup.

(10) Portable Toilets: Two (2); each shall include a urinal; each unit shall be a properly enclosed chemical unit conforming to ANSI Z4.3.

(a) Location: As directed by District.

(b) Maintenance: Maintain each unit and surrounding areas in a clean, hygienic and orderly manner, at all time. Empty, clean, and sanitize each unit each day at a location and time as directed by District.

(c) Removal: Relocate, or remove from the site, each Portable Toilet. Upon such directive by District, the Contractor shall forthwith relocate or remove each Portable Toilet and submit the affected areas to a condition which existed prior to the installation of each Portable Toilet, within three (3) calendar days, or as directed by District in writing, at no cost to District.

2.03 UTILITY AND SERVICES

A. Telephone Service: Contractor shall provide and interface the entire telephone service, and shall properly and timely pay for telephone service for District's non-long-distance use.

B. Electrical Service: Provide all proper connections and continuously pay for service for the duration of the Work.

2.04 FINISHES

A. General: Manufacturer standard finish system over surfaces properly cleaned, pretreated, and prepared to obtain proper bond; all visible surfaces shall be coated.

B. Finish: Color as selected by District from manufacturer standard palette.

PART 3 – EXECUTION

3.01 INSTALLATION

A. General: Properly prepare area and affected items to receive the Work. Set Work accurately in location, alignment, and elevation; rigidly, securely, and firmly anchor to appropriate structure; install plumb, straight, square, level, true, without racking, rigidly anchored to proper solid blocking, substrate, and the like; provide appropriate type and quantity of reinforcements, fasteners, adhesives, self-adhesive and other tapes; lubricants, coatings, accessories, and the like, as required for a complete, structurally rigid, stable, sound, and appropriately finished installation, in accordance with manufacturer's published instructions, and as indicated. The more restrictive and higher quality requirement shall govern. Moving parts shall be properly secured, without binding, looseness, noise, and the like.

B. Installation: Install in accordance with 25 CCR 3.2.3 and as directed by District; jack up trailer and level both ways; mount on proper concrete piers with all load off wheels; provide required tie down and accessories per Section 4368 of referenced CCR, and as directed by District.

C. Rejected Work: Work, materials, unit, items, systems, and the like, not accepted by District shall be deemed rejected, and shall forthwith be removed and replaced with proper and new Work, materials, unit, items, systems, and the like at no cost to District.

D. Standard: Comply with manufacturer's published instructions, or with instructions as shown or indicated; the more restrictive and higher quality requirement shall govern.

E. Location: As directed by District.

F. Fire Resistance: Construct and install in accordance with UL requirements.

G. Maintenance: Contractor shall maintain trailer and adjacent areas in a safe, clean and hygienic condition throughout the duration of the Work, and as directed by District. Properly repair or replace furniture or other items, as directed by District. Properly remove unsafe, damaged, or broken furniture, or similar items, and replace with safe and proper items. Contractor shall pay cost of all services, repair, and maintenance, or replacement of each item.

H. Janitorial Service: Provide professional janitorial services, including, but not limited to, trash, waste paper baskets, fill paper dispensers; clean and dust all furniture, files, and the like; sweep and mop resilient and similar flooring; and vacuum carpeting and similar flooring.

(1) Frequency: Two (2) times per week, minimum.

I. Removal: Properly remove the Office Trailer and contents from the Site upon completion of the Contract, or as directed by District in writing. Forthwith properly patch and repair affected areas; replace damaged items with new items. Carefully and properly inventory, clean, pack, store, and protect District property; submit District property to District at a date, time and location as directed by District.

END OF DOCUMENT

DOCUMENT 01 64 00

OWNER-FURNISHED PRODUCTS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions;

B. Special Conditions; and

C. Materials and Equipment.

1.02 SECTION INCLUDES

A. Requirements for the following:

(1) Installing Owner-furnished materials and equipment.

(2) Providing necessary utilities, connections and rough-ins.

1.03 DEFINITIONS

A. Owner: District, who is providing/furnishing materials and equipment.

B. Installing Contactor: Contractor, who is installing the materials and equipment furnished by the Owner.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Receive, store and handle products in accordance with the manufacturer's instructions.

B. Protect equipment items as required to prevent damage during storage and construction.

PART 2 – PRODUCTS

2.01 GENERAL PRODUCT REQUIREMENTS

A. Installing Contractor's Responsibilities:

(1) Verify mounting and utility requirements for Owner-furnished materials and equipment items.

(2) Provide mounting and utility rough in for all items where required.

(a) Rough in locations, sizes, capacities, and similar type items shall be as indicated and required by product manufacturer.

B. Owner and Installing Contractor(s) Responsibilities:

(1) Owner-Furnished/Contractor Installed ("OFCI"): Furnished by the Owner; installed by the Installing Contractor.

(a) General: Owner and Installing Contractor(s) will coordinate deliveries of materials and equipment to coincide with the construction schedule.

(b) Owner will furnish specified materials and equipment delivered to the site. Owner/vendor's representative shall be present on Site at the time of delivery to comply with the contract requirements and Specifications Section 01 43 00, Materials and Equipment, Article 1.04.

(c) The Owner furnishing specified materials and equipment is responsible to provide manufacturer guarantees as required by the Contract to the Installing Contractor.

(d) The Installing Contractor shall:

1) Review, verify and accept the approved manufacturer's submittal/Shop Drawings for all materials and equipment required to be installed by the Installer Contractor and furnished by the Owner. Any discrepancies, including but not limited to possible space conflicts, should be brought to the attention of the Project Manager and/or Program Manager, if applicable.

2) Coordinate timely delivery. Installing Contractor shall receive materials and equipment at Site when delivered and give written receipt at time of delivery, noting visible defects or omissions; if such declaration is not given, the Installing Contractor shall assume responsibility for such defects and omissions.

3) Store materials and equipment until ready for installation and protect from loss and damage. Installing Contractor is responsible for providing adequate storage space.

4) Coordinate with other bid package contractors and field measurement to ensure complete installation.

5) Uncrate, assemble, and set in place.

6) Provide adequate supports.

7) Install materials and equipment in accordance with manufacturer's recommendations, instructions, and

Shop Drawings, supply labor and material required, and make mechanical, plumbing, and electrical connections required to operate equipment.

8) Be certified by equipment manufacturer for installation of the specific equipment supplied by the Owner.

9) Provide anchorage and/or bracing as required for seismic restraint per Title 24, UBC Standard 27-11 and all other applicable codes.

10) Provide the contract-required warranty and guarantee for all work, materials and equipment, and installation upon its completion and acceptance by the District. Guarantee includes all costs associated with the removal, shipping to and from the Site, and re-installation of any equipment found to be defective.

C. Compatibility with Space and Service Requirements:

(1) Equipment items shall be compatible with space limitations indicated and as shown on the Contract Documents and specified in other sections of the Specifications.

(2) Modifications to equipment items required to conform to space limitations specified for rough in shall not cause additional cost to the District.

D. Manufacturer's printed descriptions, specifications, and instructions shall govern the Work unless specifically indicated or specified otherwise.

2.02 FURNISHED MATERIALS AND EQUIPMENT

A. All furnished materials and equipment are indicated or scheduled on the Contract Documents.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Install equipment items in accordance with the manufacturer's instructions.

B. Set equipment items securely in place, rigidly or flexibly mounted in accordance with manufacturers' directions.

C. Make electrical and mechanical connections as indicated and required.

D. Touch-up and restore damaged or defaced finishes to the Owner's satisfaction.

3.02 CLEANING AND PROTECTION

A. Repair or replace items not acceptable to the Architect or Owner.

B. Upon completion of installation, clean equipment items in accordance with manufacturer's recommendations, and protect from damage until final acceptance of the Work by the Owner.

END OF DOCUMENT

SECTION 01 66 00

PRODUCT DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;

B. Special Conditions.

1.02 PRODUCTS

A. Products are as defined in the General Conditions.

B. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.

C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.

B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.

C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.

B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.

C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.

D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.

E. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.

F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.

G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 71 23

FIELD ENGINEERING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Site Investigation, and Soils Investigation Report;

B. Special Conditions;

C. Site-Visit Certification.

1.02 REQUIREMENTS INCLUDED:

A. Contractor shall provide and pay for field engineering services by a California-registered engineer, required for the project, including, without limitations:

(1) Survey work required in execution of the Project.

(2) Civil or other professional engineering services specified, or required to execute Contractor's construction methods.

1.03 QUALIFICATIONS OF SURVEYOR OR ENGINEERS:

Contractor shall only use a qualified licensed engineer or registered land surveyor, to whom District makes no objection.

1.04 SURVEY REFERENCE POINTS:

A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.

B. Contractor shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition Contractor shall:

(1) Make no changes or relocation without prior written notice to District and Architect.

(2) Report to District and Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.

(3) Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

1.05 RECORDS:

Contractor shall maintain a complete, accurate log of all control and survey work as it progresses.

1.06 SUBMITTALS:

A. Contractor shall submit name and address of Surveyor and Professional Engineer to District and Architect prior to its/their work on the Project.

B. On request of District and Architect, Contractor shall submit documentation to verify accuracy of field engineering work, at no additional cost to the District.

C. Contractor shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION

3.01 COMPLIANCE WITH LAWS:

Contractor is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.

3.02 NONCONFORMING WORK:

Contractor is responsible for any re-surveying required by correction of nonconforming work.

END OF DOCUMENT

DOCUMENT 01 73 29

CUTTING AND PATCHING

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Inspector, Inspections, and Tests, Integration of Work, Nonconforming Work, and Correction of Work, and Uncovering Work;

B. Special Conditions;

C. Hazardous Materials Procedures and Requirements;

D. Hazardous Materials Certification;

E. Lead-Based Paint Certification;

F. Imported Materials Certification.

1.02 CUTTING AND PATCHING:

A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:

(1) Make several parts fit together properly.

(2) Uncover portions of Work to provide for installation of ill-timed Work.

(3) Remove and replace defective Work.

(4) Remove and replace Work not conforming to requirements of Contract Documents.

(5) Remove Samples of installed Work as specified for testing.

(6) Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

(7) Attaching new materials to existing remodeling areas – including painting (or other finishes) to match existing conditions.

B. In addition to Contract requirements, upon written instructions from the District, Contractor shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by District; and remove Work to provide for alteration of existing Work.

C. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.

1.03 SUBMITTALS:

A. Prior to any cutting or alterations that may affect the structural safety of Project, or work of others, and well in advance of executing such cutting or alterations, Contractor shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration, including the following:

(1) The work of the District or other trades.

(2) Structural value or integrity of any element of Project.

(3) Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.

(4) Efficiency, operational life, maintenance or safety of operational elements.

(5) Visual qualities of sight-exposed elements.

B. Contractor's Request shall also include:

(1) Identification of Project.

(2) Description of affected Work.

(3) Necessity for cutting, alteration, or excavations.

(4) Effects of Work on District, other trades, or structural or weatherproof integrity of Project.

(5) Description of proposed Work:

(a) Scope of cutting, patching, alteration, or excavation.

(b) Trades that will execute Work.

(c) Products proposed to be used.

(d) Extent of refinishing to be done.

(6) Alternates to cutting and patching.

(7) Cost proposal, when applicable.

(8) The scheduled date the Contractor intends to perform the Work and the duration of time to complete the Work.

(9) Written permission of District or other District contractor(s) whose work will be affected.

1.04 QUALITY ASSURANCE:

A. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.

B. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.

1.05 PAYMENT FOR COSTS:

A. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District, its consultants, including but not limited to the Construction Manager, the Architect, the Project Inspector(s), Engineers, and Agents, will be paid by Contractor and/or deducted from the Contract by the District.

B. District shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order. Contractor shall provide written cost proposals prior to proceeding with cutting and patching.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.

B. Materials to be cut and patched include those damaged by the performance of the Work.

PART 3 – EXECUTION

3.01 INSPECTION:

A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.

B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by District.

3.02 PREPARATION:

A. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.

B. Contractor shall provide devices and methods to protect other portions of Project from damage.

C. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

3.03 ERECTION, INSTALLATION AND APPLICATION:

A. With respect to performance, Contractor shall:

(1) Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.

(2) Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.

(3) Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.

B. Contractor shall employ original installer or fabricator to perform cutting and patching for:

(1) Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.

(2) Sight-exposed finished surfaces.

C. Contractor shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.

D. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.

E. Contractor shall restore Work which has been cut or removed. Contractor shall install new products to provide completed Work in accordance with

requirements of the Contract Documents and as required to match surrounding areas and surfaces.

F. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

END OF DOCUMENT

DOCUMENT 01 76 00

ALTERATION PROJECT PROCEDURES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Integration of Work, Purchase of Materials and Equipment, Uncovering of Work and Non-conforming Work and Correction of Work and Trenches;

B. Special Conditions.

PART 2 - PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK:

A. New Materials: As specified in the Contract Documents including, without limitation, in the Specifications, Contractor shall match existing products, conditions, and work for patching and extending work.

B. Type and Quality of Existing Products: Contractor shall determine by inspection, by testing products where necessary, by referring to existing conditions and to the Work as a standard.

PART 3 - EXECUTION

3.01 EXAMINATION:

A. Contractor shall verify that demolition is complete and that areas are ready for installation of new Work.

B. By beginning restoration Work, Contractor acknowledges and accepts the existing conditions.

3.02 PREPARATION:

A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Contractor shall replace and restore these at completion.

B. Contractor shall remove unsuitable material not as salvage unless otherwise indicated in the Contract Documents. Unsuitable material may include, without limitation, rotted wood, corroded metals, and deteriorated masonry and concrete. Contractor shall replace materials as specified for finished Work.

C. Contractor shall remove debris and abandoned items from all areas of the Site and from concealed spaces.

D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.

E. Contractor shall close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Contractor shall insulate ductwork and piping to prevent condensation in exposed areas. Contractor shall insulate building cavities for thermal and/or acoustical protection, as detailed.

3.03 INSTALLATION:

A. Contractor shall coordinate Work of all alternations and renovations to expedite completion and to accommodate District occupancy.

B. Designated Areas and Finishes: Contractor shall complete all installations in all respects, including operational, mechanical work and electrical work.

C. Contractor shall remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.

D. Contractor shall refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat and square or straight transition to adjacent finishes.

E. Contractor shall install products as specified in the Contract Documents, including without limitation, the Specifications.

3.04 TRANSITIONS:

A. Where new Work abuts or aligns with existing, Contractor shall perform a smooth and even transition. Patched Work must match existing adjacent work in texture and appearance.

B. When finished surfaces are cut so that a smooth transition with new Work is not possible, Contractor shall terminate existing surface along a straight line at a natural line of division and make a recommendation for resolution to the District and the Architect for review and approval.

3.05 ADJUSTMENTS:

A. Where removal of partitions or walls results in adjacent spaces becoming one, Contractor shall rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.

B. Where a change of plane of 1/4 inch or more occurs, Contractor shall submit a recommendation for providing a smooth transition to the District and the Architect for review and approval.

C. Contractor shall trim and seal existing wood doors and shall trim and paint metal doors as necessary to clear new floor finish and refinish trim as required.

D. Contractor shall fit Work at penetrations of surfaces.

3.06 REPAIR OF DAMAGED SURFACES:

A. Contractor shall patch or replace portions of existing surfaces, which are damaged, lifted, discolored, or showing other imperfections, in the area where the Work is performed.

B. Contractor shall repair substrate prior to patching finish.

3.07 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS:

A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored by Contractor to their original condition or better, where indicated.

B. Contractor shall protect and replace, if damaged, all existing guard posts, barricades, and fences.

C. Contractor shall give special attention to avoid damaging or killing trees, bushes and/or shrubs on the Premises and/or identified in the Contract Documents, including without limitation, the Drawings.

3.08 FINISHES:

A. Contractor shall finish surfaces as specified in the Contract Documents, including without limitations, the provisions of all Divisions of the Specifications.

B. Contractor shall finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, Contractor shall refinish entire surface to nearest intersections.

3.09 CLEANING:

A. Contractor shall continually clean the Site and the Premises as indicated in the Contract Documents, including without limitation, the provisions in the General Conditions and the Specifications regarding cleaning.

END OF DOCUMENT

DOCUMENT 01 77 00

CONTRACT CLOSEOUT AND FINAL CLEANING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Completion of Work;

B. Special Conditions;

C. Temporary Facilities and Controls.

1.02 CLOSEOUT PROCEDURES

Contractor shall comply with all closeout provisions as indicated in the General Conditions.

1.03 FINAL CLEANING

A. Contractor shall execute final cleaning prior to final inspection.

B. Contractor shall clean interior and exterior glass and all surfaces exposed to view; remove temporary labels, tape, stains, and foreign substances, polish transparent and glossy surfaces, wax and polish new vinyl floor surfaces, vacuum carpeted and soft surfaces.

C. Contractor shall clean equipment and fixtures to a sanitary condition.

D. Contractor shall replace filters of operating equipment.

E. Contractor shall clean debris from roofs, gutters, down spouts, and drainage systems.

F. Contractor shall clean Site, sweep paved areas, and rake clean landscaped surfaces.

G. Contractor shall remove waste and surplus materials, rubbish, and construction facilities from the Site and surrounding areas.

1.04 ADJUSTING

Contractor shall adjust operating products and equipment to ensure smooth and unhindered operation.

1.05 RECORD DOCUMENTS AND SHOP DRAWINGS

A. Contractor shall legibly mark each item to record actual construction, including:

(1) Measured depths of foundation in relation to finish floor datum.

(2) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permit surface improvements.

(3) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.

(4) Field changes of dimension and detail.

(5) Details not on original Contract Drawings

(6) Changes made by modification(s).

(7) References to related Shop Drawings and modifications.

B. Contractor will provide one set of Record Drawings to District.

C. Contractor shall submit all required documents to District and/or Architect prior to or with its final Application for Payment.

1.06 INSTRUCTION OF DISTRICT PERSONNEL

A. Before final inspection, at agreed upon times, Contractor shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.

B. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six months or by the change of season.

C. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

D. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when the need for such data becomes apparent during instruction.

E. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

1.07 SPARE PARTS AND MAINTENANCE MATERIALS

A. Contractor shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.

B. Contractor shall provide District with all required Operation and Maintenance Data at one time. Partial or piecemeal submissions of Operation and Maintenance Data will not be accepted.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 78 23

OPERATION AND MAINTENANCE DATA

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Completion of the Work;

B. Special Conditions.

1.02 QUALITY ASSURANCE:

Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.03 FORMAT:

A. Contractor shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").

B. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Contractor shall correlate data into related consistent groupings.

C. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.

D. Contractor shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.

E. Contractor shall provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.

F. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.

G. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

1.04 CONTENTS, EACH VOLUME:

A. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of products and systems, indexed to content of the volume.

B. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.

C. Product Data: Contractor shall mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.

D. Drawings: Contractor shall supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall not use Project Record Documents as maintenance drawings.

E. Text: Contractor shall include any and all information as required to supplement product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

F. Warranties and Bonds: Contractor shall bind in one copy of each.

1.05 MANUAL FOR MATERIALS AND FINISHES:

A. Building Products, Applied Materials, and Finishes: Contractor shall include product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured products.

B. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

C. Moisture Protection and Weather Exposed Products: Contractor shall include product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.

D. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.

E. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS:

A. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.

B. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.

C. Contractor shall include color coded wiring diagrams as installed.

D. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.

E. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

F. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.

G. Contractor shall include manufacturer's printed operation and maintenance instructions.

H. Contractor shall include sequence of operation by controls manufacturer.

I. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.

J. Contractor shall provide control diagrams by controls manufacturer as installed.

K. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.

L. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.

M. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.

N. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).

O. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.07 SUBMITTAL:

A. Contractor shall submit to the District for review two (2) copies of preliminary draft or proposed formats and outlines of the contents of the Manual within thirty (30) days of Contractor’s start of Work.

B. For equipment, or component parts of equipment put into service during construction and to be operated by District, Contractor shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.

C. Contractor shall submit two (2) copies of a complete Manual in final form prior to final Application for Payment. Copy will be returned with Architect/Engineer comments. Contractor must revise the content of the Manual as required by District prior to District's approval of Contractor's final Application for Payment.

D. Contractor must submit two (2) copies of revised Manual in final form within ten (10) days after final inspection.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 78 36

WARRANTIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Warranty/Guarantee Information;

B. Special Conditions.

1.02 FORMAT

A. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.

B. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.

C. Table of Contents: Contractor shall provide title of Project; name, address, and telephone number of Contractor and equipment supplier; and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the product or work item is specified.

D. Contractor shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

1.03 PREPARATION:

A. Contractor shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of warranty blank until the date of completion is determined.

B. Contractor shall verify that documents are in proper form, contain full information, and are notarized, when required.

C. Contractor shall co-execute submittals when required.

D. Contractor shall retain warranties until time specified for submittal.

1.04 TIME OF SUBMITTALS:

A. For equipment or component parts of equipment put into service during construction with District's permission, Contractor shall submit a draft warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.

B. Contractor shall submit for District approval all warranties and related documents within ten (10) days after date of completion. Contractor must revise the warranties as required by the District prior to District's approval of Contractor's final Application for Payment.

C. For items of work delayed beyond date of completion, Contractor shall provide an updated submittal within ten (10) days after acceptance, listing the date of acceptance as start of warranty period.

PART 2 - PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 78 39

RECORD DOCUMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

A. General Conditions, including, without limitation, Documents on Work;

B. Special Conditions.

PART 2 - RECORD DRAWINGS

2.01 GENERAL:

A. As indicated in the Contract Documents, the District will provide Contractor with one set of reproducible, full size original Contract Drawings (mylars).

B. Contractor shall maintain at each Project Site one set of marked-up plans and shall transfer all changes and information to those marked-up plans, as often as required in the Contract Documents, but in no case less than once each month. Contractor shall submit to the Project Inspector one set of reproducible vellums of the Project Record Drawings ("As-Builts") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Builts shall be available at the Project Site. The Contractor shall submit reproducible vellums at the conclusion of the Project following review of the blueline prints.

C. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.

D. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Claim Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Contractor.

E. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

2.02 RECORD DRAWING INFORMATION:

A. Contractor shall record the following information:

(1) Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.

(2) Actual numbering of each electrical circuit to match panel schedule.

(3) Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.

(4) Locations of all items, not necessarily concealed, which vary from the Contract Documents.

(5) Installed location of all cathodic protection anodes.

(6) Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.

(7) Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.

(8) Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.

In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.

B. Contractor shall provide additional drawings as necessary for clarification.

C. Contractor shall provide reproducible record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

D. After review and approval of the marked-up specifications by the Project Inspector, Contractor shall provide electronic copies of the drawings (in PDF format) with one file with all of the sheets and one set of individual sheet files at the conclusion of the Project.

PART 3 - RECORD SPECIFICATIONS

3.01 GENERAL:

A. Contractor shall mark each section legibly to record manufacturer, trade name, catalog number, and supplier of each Product and item of equipment actually installed.

B. After review and approval of the marked-up specifications by the Project Inspector, Contractor shall provide one electronic copy of the specifications (in PDF format) at the conclusion of the Project.

PART 4 - MAINTENANCE OF RECORD DOCUMENTS

4.01 GENERAL

A. Contractor shall store Record Documents apart from documents used for construction as follows:

(1) Provide files and racks for storage of Record Documents.

(2) Maintain Record Documents in a clean, dry, legible condition and in good order.

B. Contractor shall not use Record Documents for construction purposes.

PART 5 – PRODUCTS Not Used.

END OF DOCUMENT

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
COMMUNITY WORKFORCE AGREEMENT

This Agreement is entered into this 8th day of December, 2016 by and between the Alum Rock Union Elementary School District (hereinafter the "District"), together with contractors and subcontractors of all tiers, who shall become signatory to this Agreement by signing the **Agreement To Be Bound** ("**Addendum A**") (referred to collectively herein as "Contractor(s)/Employer(s)"), and the Santa Clara and San Benito Counties Building & Construction Trades Council (hereinafter the "Council") and its affiliated local Unions that have executed this Agreement (referred to collectively herein as "Union" or "Unions").

The purpose of this Agreement is to promote the efficiency of construction operations for the District through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of Projects funded by proceeds from Measure I and/or Measure J bonds.

WHEREAS, the timely and successful completion of the Project is of the utmost importance to meet the needs of the District and avoid increased costs resulting from delays in construction; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, and will be represented by the Unions signatory to this Agreement and employed by contractors and subcontractors who are also signatory to this Agreement; and

WHEREAS, the use of skilled labor on construction work increases the safety of construction projects as well as the quality of completed work; and

WHEREAS, it is recognized that on projects of this magnitude with multiple contractors and bargaining units on the job site at the same time over an extended period of time, the potential for work disruption is substantial without an overriding commitment to maintain continuity of work; and

WHEREAS, the interests of the District, the Unions, the Contractor(s)/Employer(s) and the public would be best served if construction work proceeded in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractor(s)/Employer(s) and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Project and to encourage close cooperation among the Contractor(s)/Employer(s) and the Unions so that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, the parties agree that one of the primary purposes of this Agreement is to avoid the tensions that might arise on the Project if Union and non-union workers of different employers were to work side by side on the Project, potentially leading to labor disputes that could delay completion of the Project; and

WHEREAS, this Agreement is not intended to replace, interfere with, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as a legally binding agreement exists between the

Contractor(s)/Employer(s) and the affected Union(s), except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, the contract(s) for construction work on the Project will be awarded in accordance with the applicable provisions of the California Public Contracts Code and all state, local and federal laws; and

WHEREAS, the District has the absolute right to select the lowest responsive and responsible bidder for the award of the construction contract(s) on the Project; and

WHEREAS, the District places high priority upon the development of comprehensive programs for the recruitment, training and employment of District graduates, underrepresented workers and targeted workers, and recognizes the ability of local pre-apprenticeship and apprenticeship programs to provide meaningful and sustainable careers in the building and construction industry; and

WHEREAS, the parties to this Agreement pledge their full good faith and trust to work toward the mutually satisfactory completion of the Project; and

WHEREAS, the District has previously entered into a Construction Careers Agreement for prior projects and has experienced positive benefits with its relationship with the Unions; and the District Board of Directors has approved the use of this Agreement.

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO, AS FOLLOWS:

ARTICLE I
DEFINITIONS

1.1 "Agreement" means this Community Workforce Agreement.

1.2 "Agreement to be Bound" means the agreement (attached hereto and incorporated herein as Addendum A) that shall be executed by each and every Contractor/Employer as a condition of performing Project work.

1.3 "Completion" means that point at which there is Final Acceptance by the District of a Construction Contract and the District has filed a Notice of Completion. For the purposes of this definition, "Final Acceptance" means that point in time at which the engineer for the District has determined upon final inspection that the work has been completed in all respects and all required contract documents, contract drawings, warranties, certificates, manuals and data have been submitted and training completed in accordance with the contract documents, and the District has executed a written acceptance of the work.

1.4 "Construction Contract(s)" means all public works or improvement contract(s) (including design-bid, design-build, lease-leaseback or other contracts under which construction of the Project is done) awarded by the District that are necessary to complete the Project.

1.5 "Contractor(s)/Employer(s)" or "Contractor(s)" or "Employer(s)" means any individual, firm, partnership or corporation (including the prime contractor, general contractor, construction manager, project manager, design-build entity, lease-leaseback entity or equivalent

entity), or combination thereof, including joint ventures, and their successors and assigns, that is an independent business enterprise and that enters into a contract with the District with respect to the construction of any part of the Project, under contract terms and conditions approved by the District and which incorporate this Agreement, and all contractors or subcontractors of any tier.

1.6 "Council" means the Santa Clara and San Benito Counties Building & Construction Trades Council.

1.7 "District" means the Alum Rock Union Elementary School District, its Board of Directors, officers, agents, employees and administrative staff, including managerial personnel.

1.8 "Master Agreement" or "Schedule A" means the Master Collective Bargaining Agreement of each craft Union signatory hereto.

1.9 "Project" means all District construction projects paid for in whole or in part out of Measure I and/or Measure J funds. The District and the Council may mutually agree in writing to add additional components to the Project's scope of work covered by this Agreement. Although "Project" is used throughout this Agreement in the singular, it applies to all projects as defined in this Section.

1.10 "Project Manager" means the person(s) or entity(ies) designated by the District to oversee all phases of construction on the Project and the implementation of this Agreement, and who works under the guidance of the District's authorized representative.

1.11 "Union" or "Unions" means the Santa Clara and San Benito Counties Building & Construction Trades Council, AFL-CIO, and its affiliated Unions signatory to this Agreement, acting on their own behalf and on behalf of their respective affiliates and member organizations, whose names are subscribed hereto and who have through their officers executed this Agreement.

ARTICLE II
SCOPE OF AGREEMENT

2.1 Parties: This Agreement applies to and is limited to all Contractor(s)/Employer(s) performing Construction Contracts on the Project (including subcontractors at any tier), and their successors and assigns, the District, the Council and its affiliated Unions signatory to this Agreement.

2.2 Applicability: This Agreement governs all Construction Contracts awarded on the Project. For the purposes of this Agreement, Construction Contracts shall be considered completed as set forth in Section 1.3, except when the District directs a Contractor to engage in repairs, warranty work, modifications or punch list work as required under a Construction Contract with the District, or when a Contractor performs work under a change order for a Construction Contract.

2.3 Covered Work: This Agreement covers, without limitation, all on-site site preparation, surveying, construction, alteration, demolition, installation, improvement, remediation, retrofit, painting or repair of buildings, structures and other works, and related

activities for the Project that is within the craft jurisdiction of one of the Unions and which is directly or indirectly part of the Project, including, without limitation to the following examples, geotechnical and exploratory drilling, temporary HVAC, landscaping and temporary fencing, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, start-up, and modular furniture installation. On-site work includes work done for the Project in temporary yards, dedicated sites, or areas adjacent to the Project, and at any on-site or off-site batch plant constructed solely to supply materials to the Project. This scope of work includes all soils and materials testing and inspection where such testing and inspection is a classification in which a prevailing wage determination has been published.

2.3.1 This Agreement applies to any start-up, calibration, commissioning, performance testing, repair, maintenance, and operational revisions to systems and/or subsystems for the Project performed after Completion unless it is performed by District employees.

2.3.2 This Agreement covers all on-site fabrication work over which the District, Contractor(s)/Employer(s) or subcontractor(s) possess the right of control (including work done for the Project in any temporary yard or area established for the Project). Additionally, this Agreement covers any off-site work, including fabrication necessary for the Project defined herein, that is covered by a current Schedule A Agreement or local addenda to a National Agreement of the applicable Union(s). This Agreement also covers work done off-site that is specifically dedicated to processing of materials that would otherwise be done on site if space was available (e.g. concrete batch plant, form or panel construction).

2.3.3 The furnishing of supplies, equipment or materials which are stockpiled for later use shall not be covered by this Agreement. However, construction trucking work, such as the delivery of ready-mix, asphalt, aggregate, sand, or other fill or similar material which is incorporated into the construction process as well as the off-hauling of debris and excess fill, material and/or mud, shall be covered by the terms and conditions of this Agreement. Contractor(s)/Employer(s), including brokers, of persons providing construction trucking work shall provide certified payroll records to the District within ten (10) days of a written request or as required by bid specifications.

2.3.4 In limited circumstances requiring specialized knowledge of particular item(s), this Agreement shall not apply to construction persons designated by a manufacturer as necessary to protect the manufacturer's warranty, provided that the contractor using the manufacturer's construction persons can demonstrate by an enumeration of specific tasks that the work cannot be performed by workers employed under this Agreement. All such work must be identified and discussed by the contractor at the Pre-Construction Conference, and the contractor shall be responsible for requesting a Pre-Construction Conference if necessary to satisfy the requirements of this Section. Any dispute shall be subject to the grievance and arbitration procedures set forth in this Agreement.

2.3.5 Work covered by this Agreement within the following craft jurisdictions shall be performed under the terms of their National Agreements as follows: the National Agreement of Elevator Constructors, the National Transient Lodge (NTL) Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, and all instrument calibration work and loop checking shall be performed under the terms of the

UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, with the exception that Articles IV, XIII, XIV of this Agreement shall apply to such work.

2.4 Exclusions: The following shall be excluded from the scope of this Agreement.

2.4.1 The Agreement shall not apply to a Contractor/Employer's non-construction craft employees, including but not limited to executives, managerial employees, engineering employees, other professional engineers, supervisors above the level of General Foreman (except those covered by existing Master Agreements), and administrative and management personnel.

2.4.2 This Agreement shall not apply to any non-Project work performed on or near or leading to the site of work covered by this Agreement that is undertaken by state, county, city or other governmental bodies or their contractors, or by public or private utilities.

2.4.3 This Agreement shall not apply to off-site maintenance of leased equipment and on-site supervision of such work.

2.4.4 The District shall not be required to comply with this Agreement for any work performed with its own forces as permitted by the Public Contract Code.

2.5 Award of Contracts: It is understood and agreed that the District has the right to select any qualified bidder for the award of Construction Contracts under this Agreement. The bidder need only be willing, ready and able to execute and comply with this Agreement. It is further agreed that this Agreement shall be included in all invitations to bid or solicitations for proposals from contractors or subcontractors for work on the Project that are issued on or after the effective date of this Agreement. A copy of all invitations to bid shall be provided at time of issuance to the Council.

ARTICLE III
EFFECT OF AGREEMENT

3.1 By executing this Agreement, the Unions and the District agree to be bound by each and all of the provisions of the Agreement.

3.2 By accepting the award of work under a Construction Contract for the Project, whether as a Contractor or subcontractor thereunder, the Contractor/Employer agrees to be bound by each and every provision of the Agreement and agrees that it will evidence its acceptance prior to the commencement of work by executing the **Agreement to be Bound** in the form attached hereto as **Addendum A.**

3.3 At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of work under a Construction Contract, the Contractor/Employer shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a condition of accepting the award of a construction subcontract, to agree in writing, by executing the **Agreement to be Bound**, to be bound by each and every provision of this Agreement prior to the commencement of work. The obligations of a Contractor/Employer may not be evaded by subcontracting. If the subcontractor refuses to

execute the **Agreement to be Bound**, then such subcontractor shall not be awarded a construction subcontract to perform work on the Project.

3.4 This Agreement shall only be binding on the signatory parties hereto and their successors and assigns and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party. Each Contractor/Employer shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement. Any dispute between the Union(s) and the Contractor(s)/Employer(s) respecting compliance with the terms of the Agreement shall not affect the rights, liabilities, obligations and duties between the Union(s) and other Contractor(s)/Employer(s) party to this Agreement.

3.5 It is mutually agreed by the parties that any liability by a Union to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a Union shall not affect the rights, liabilities, obligations and duties between the Contractor(s)/Employer(s) and the other Union(s) party to this Agreement.

3.6 The provisions of this Agreement, including the Schedule As incorporated herein by reference, shall apply to the work covered by this Agreement, notwithstanding the provisions of any other local, area and/or national agreements which may conflict with or differ from the terms of this Agreement. To the extent a provision of this Agreement is inconsistent with a Schedule A, the provisions of this Agreement shall prevail. Where a provision of a Schedule A is not inconsistent with this Agreement, the provisions of the Schedule A shall apply.

ARTICLE IV
WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1 The Unions, District and Contractor(s)/Employer(s) covered by this Agreement agree that for the duration of the Project:

4.1.1 There shall be no strikes, sympathy strikes, work stoppages, picketing, hand billing or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on the Project, at the job site of the Project or any other facility of the District because of a dispute on the Project. Disputes arising between the Unions and Contractor(s)/Employer(s) on other District projects are not governed by the terms of the Agreement or this Article.

4.1.2 There shall be no lockout of any kind by a Contractor/Employer of workers employed on the Project.

4.1.3 If a Master Agreement expires before the Contractor/Employer completes the performance of work under a Construction Contract and the Union or Contractor/Employer gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike on work covered by this Agreement and the Union and the Contractor/Employer agree that the expired Master Agreement will continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached. If the new or modified Master Agreement provides that any terms of the Master Agreement shall be retroactive, the Contractor/ Employer agrees to comply with any retroactive terms of the new or modified Master Agreement that are applicable to any employee(s) on the Project during the interim, with

retroactive payment due within seven (7) calendar days of the effective date of the modified Master Agreement.

4.1.4 In the case of nonpayment of wages or trust fund contributions on the Project, the Union shall give the District and the Contractor/Employer three (3) business days' notice when nonpayment of trust fund contributions has occurred and one (1) business day's notice when nonpayment of wages has occurred or when paychecks being tendered to a financial institution normally recognized to honor such paychecks will not honor such paycheck as a result of insufficient funds, of the intent to withhold labor from the Contractor/Employer's or their subcontractor's workforce, during which time the Contractor/Employer may correct the default. In this instance, a Union's withholding of labor (but not picketing) from an Contractor/Employer who has failed to pay its fringe benefit contributions or failed to meet its weekly payroll shall not be considered a violation of this Article.

4.1.5 Notification: If the District contends that any Union has violated this Article, it will so notify, in writing, the Senior Executive of the Council and the Senior Executive of the Union, setting forth the facts alleged to violate the Article, prior to instituting the expedited arbitration procedure set forth below. The Council will immediately use its best efforts to cause the cessation of any violation of this Article. The leadership of the Union will immediately inform the workers of their obligations under this Article.

4.2 Expedited Arbitration: Any party to this Agreement shall institute the following procedure, prior to initiating any other action at law or equity, when a breach of this Article is alleged to have occurred.

4.2.1 A party invoking this procedure shall notify Robert Hirsch, as the permanent arbitrator, or Barry Winograd, as the alternate arbitrator under this procedure. In the event the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then the parties shall select the arbitrator from the list in Section 13.4. Notice to the arbitrator shall be by the most expeditious means available, with notices by facsimile, email or telephone to the District and the party alleged to be in violation, and to the Council and involved local Union if a Union is alleged to be in violation.

4.2.2 Upon receipt of said notice, the District will contact the permanent arbitrator named above, or his alternate, who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.

4.2.3 The arbitrator shall notify the parties by facsimile, email or telephone of the place and time for the hearing. Said hearing shall be completed in one session, which, with appropriate recesses at the arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of an award by the arbitrator.

4.2.4 The sole issue at the hearing shall be whether or not a violation of Section 4.1 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The award shall be issued in writing within three (3) hours

after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but the parties shall not delay compliance with or enforcement of the award due to the issuance of a written opinion. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance. Should a party found in violation of this Article fail to comply with an Arbitrator's award to cease the violation, the party in violation shall pay to the affected party as liquidated damages the sum of ten thousand dollars ($10,000.00) per shift for which it failed to comply, or portion thereof, until such violation is ceased. The Arbitrator shall retain jurisdiction to resolve any disputes regarding the liquidated damages claimed under this Section.

4.2.5 Such award may be enforced by any court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. The party filing such enforcement proceedings shall give written notice to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be *ex parte*. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.

4.2.6 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure, or which interfere with compliance, are waived by the parties.

4.2.7 The fees and expenses of the arbitrator shall be divided equally between the party instituting the arbitration proceedings provided in this Article and the party alleged to be in breach of its obligation under this Article.

4.2.8 Should either the permanent or alternate arbitrator identified above no longer work as a labor arbitrator, the District and the Council shall mutually agree to a replacement.

ARTICLE V
PRE-CONSTRUCTION CONFERENCE

5.1 Timing: Upon request of the District or the Council, the Prime Employer and/or Project Manager shall convene and conduct a pre-construction conference at a time and location mutually agreeable to the Council, with the Unions and with representatives of all involved Contractors/Employers, who shall be prepared to announce craft assignments and to discuss in detail the scope of work and the other issues set forth below, at least fourteen (14) calendar days prior to:

(a) The commencement of any Project work, and
(b) The commencement of Project work on each subsequently awarded Construction Contract.

5.2 The pre-construction conference shall be attended by a representative of each participating Contractor and each affected Union, and the Council and the District may attend at their discretion.

5.3 Pre-Construction Conference: The pre-construction conference shall include but not be limited to the following subjects:

(a) A listing of each Contractor's scope of work;
(b) The craft assignments;
(c) The estimated number of craft workers required to perform the work;
(d) Transportation arrangements;
(e) The estimated start and completion dates of the work; and
(f) Discussion of pre-fabricated materials.

5.4 Joint Administrative Committee: This Agreement is intended to provide close cooperation between management and labor. To that end, the District and Council shall each designate two representatives to serve on a Joint Administrative Committee ("JAC"), each of whom may designate an alternate. JAC members may invite participation by a Contractor or Union as needed. The JAC shall meet periodically, at the request of any member, to review progress on the Project and to discuss matters of general concern, such as safety and security. The JAC shall serve as a forum to foster communication between management and labor, and to assist the Unions and the Contactors to complete the Project in an economic and efficient manner without interruption, delays or work stoppages. The JAC shall have no authority to review grievances or disputes involving this Agreement, which are subject to the applicable grievance procedure.

ARTICLE VI
NO DISCRIMINATION

6.1 The Contractor(s)/Employer(s) and Unions agree to comply with all anti-discrimination provisions of federal, state and local law, to protect employees and applicants for employment on the Project.

ARTICLE VII
UNION SECURITY

7.1 The Contractor(s)/Employer(s) recognize the Union(s) as the sole bargaining representative of all craft employees working within the scope of this Agreement.

7.2 All employees who are employed by Contractor(s)/Employer(s) to work on the Project will be required to become members and maintain membership in the appropriate Union on or before eight (8) days of consecutive or cumulative employment on the Project. Membership under this Section shall be satisfied by the tendering of periodic dues and fees uniformly required to the extent allowed by the law.

7.3 Authorized representatives of the Union(s) shall have access to the Project whenever work covered by this Agreement is being, has been, or will be performed on the Project.

ARTICLE VIII
REFERRAL

8.1 The Contractor(s)/Employer(s) performing construction work on the Project described in the Agreement shall, in filling craft job requirements, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto. The Contractor/Employer(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement.

8.2 The Contractor(s)/Employer(s) shall have the unqualified right to select and hire directly all supervisors above the level of general foreman it considers necessary and desirable, without such persons being referred by the Union(s) (unless such craft construction employees are covered by existing Master Agreements).

8.3 In the event that referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor/Employer for employees within a forty-eight (48) hour period (Saturdays, Sundays and Holidays excluded) after such requisition is made by the Contractor/Employer, the Contractor/Employer shall be free to obtain workers from any source. A Contractor/Employer who hires any worker(s) to perform Covered Work on the Project pursuant to this section shall immediately provide the appropriate Union with the name and address of such employee(s) and shall immediately refer such employee(s) to the appropriate Union to satisfy the requirements of Article VII of this Agreement.

8.4 Targeted Hiring: In order to increase construction job opportunities for District graduates, underrepresented workers and targeted workers, the parties shall comply with the Targeted Hiring Agreement attached hereto as **Addendum B**.

ARTICLE IX
WAGES AND BENEFITS

9.1 The Contractor(s)/Employer(s) agree to pay contributions to the vacation, pension and other form of deferred compensation plan, apprenticeship, worker protection and assistance, and health benefit funds established by the applicable Master Agreement(s) for each hour worked on the Project, in the amounts designated in the Master Agreement(s) of the appropriate Union(s).

9.2 By signing this Agreement, the Contractor(s)/Employer(s) adopt and agree to be bound by the written terms of the legally established Trust Agreements, as described in Section 9.1, which may from time to time be amended, specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractor(s)/Employer(s) authorize the parties to such local trust agreements to appoint trustees and successor trustees to administer the Trust Funds and hereby ratify and accept the trustees so appointed as if made by the Contractor(s)Employer(s). The Contractor(s)/Employer(s) agrees to execute a Subscription Agreement(s) when such Trust Fund(s) requires such document(s).

9.3 Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on the Project shall be governed by the Master Agreement of the respective crafts, to the extent such Master Agreement is not inconsistent with this Agreement. Where a subject is covered by the Master Agreement and not covered by this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.

9.4 Holidays: Holidays shall be in compliance with the applicable Schedule A.

ARTICLE X
APPRENTICES

10.1 Recognizing the need to develop adequate numbers of competent workers in the construction industry, the Contractor(s)/Employer(s) shall employ apprentices from a California state-approved Joint Apprenticeship Training Program in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.

10.2 The apprentice ratios will be in compliance with the applicable provisions of the California Labor Code and Prevailing Wage Rate Determinations.

10.3 Consistent with the Master Agreements, there shall be no restrictions on the utilization of apprentices in performing the work of their craft, provided they are properly supervised. The Unions agree to cooperate with the Contractor(s)/Employer(s) in furnishing apprentices as requested up to the maximum percentage, in compliance with the applicable Master Agreement and the state-approved apprenticeship standards for that craft.

ARTICLE XI
HELMETS TO HARDHATS

11.1 The Contractor(s)/Employer(s) and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractor(s)/Employer(s) and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (the "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

11.2 The Unions and Contractor(s)/Employer(s) agree to coordinate with the Center to participate in an integrated database of veterans interested in working on the Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

ARTICLE XII
COMPLIANCE

12.1 It shall be the responsibility of the Contractor(s)/Employer(s) and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article IX. Nothing in this Agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Contractor(s)/ Employer(s) on the Project. The District shall monitor and enforce compliance with the prevailing wage requirements of the state, and the Contractor(s)/Employer(s)' compliance with this Agreement.

ARTICLE XIII
GRIEVANCE ARBITRATION PROCEDURE

13.1 Project Labor Disputes: All disputes involving the application or interpretation of the Master Agreement to which a Contractor/Employer and a Union are parties shall be resolved pursuant to the resolution procedures of the Master Agreement. All disputes relating to the interpretation or application of this Agreement, other than disputes under Article IV (Work Stoppages, Strikes, Sympathy Strikes and Lockouts) and Article XIV (Work Assignments and Jurisdictional Disputes), shall be subject to resolution by the grievance arbitration procedures set forth herein.

13.2 Employee Discipline: All disputes involving the discipline and/or discharge of an employee working on the Project shall be resolved through the grievance and arbitration provisions contained in the Master Agreement for the craft of the affected employee. No employee working on the Project shall be disciplined or discharged without just cause.

13.3 No grievance shall be recognized unless the grieving party (Local Union or District Council, on its own behalf, or on behalf of an employee whom it represents, or a Contractor/Employer on its own behalf) provides notice in writing to the party with whom it has a dispute within five (5) business days after becoming aware of the dispute but in no event more than thirty (30) calendar days after it reasonably should have become aware of the event giving rise to the dispute. Time limits may be extended by mutual agreement of the parties.

13.4 Grievances shall be settled according to the following procedures:

Step 1: Within five (5) business days after the receipt of the written notice of the grievance, the representative of the involved Local Union or District Council, or his/her designee, or the representative of the employee, and the representative of the involved Contractor/Employer, shall confer and attempt to resolve the grievance.

Step 2: If the grievance is not settled in Step 1, within five (5) business days of the Step 1 meeting, the alleged grievance may be referred in writing by either involved party to the Business Manager(s) of the affected Union(s) involved, and the Labor Relations Manager of the Contractor/Employer, or the Contractor/Employer's designated representative, for discussion and resolution. Regardless of which party has initiated the grievance, the Union shall notify its International Union representative prior to the Step 2 meeting, and the International Union

representative shall advise if it intends to participate in the Step 2 meeting. The Project Manager and the Council shall have the right to participate in any efforts to resolve the dispute at Step 2.

Step 3: If the grievance is not settled in Step 2, within five (5) business days of the Step 2 meeting, either party may request the dispute be submitted to arbitration or the time may be extended by mutual agreement of the parties. Within five (5) business days after referral of the dispute to Step 3, the representatives shall notify the permanent arbitrator, or if he/she is not available, the alternate arbitrator, for final and binding arbitration. The parties agree that if the permanent arbitrator or the alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of three (3) below. The order of striking names from the list of arbitrators shall be determined by a coin toss, the winner of which shall decide whether they wish to strike first or second.

1. William Riker

2. Morris Davis

3. William Engler

13.5 The decision of the Arbitrator shall be final and binding on all parties. The Arbitrator shall have no authority to change, amend, add to or detract from any of the provisions of the Agreement. The expense of the Arbitrator shall be borne equally by both parties. The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding Arbitrator.

13.6 The time limits specified at any step of the Grievance Procedure may be extended by mutual agreement of the parties. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without an agreed upon extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing and/or resolution of like or similar grievances or disputes.

13.7 In order to encourage the resolution of disputes and grievances at Steps 1 and 2 of this Grievance Procedure, the parties agree that such settlements shall not be precedent setting.

13.8 Retention: At the time a grievance is submitted under this Agreement or any Master Agreement, the Union may request that the District withhold and retain an amount from what is due and owing to the Contractor against whom the grievance is filed, sufficient to cover the damages alleged in the grievance, should the Unions prevail. The amount shall be retained by the District until such time as the underlying grievance giving rise to the retention is withdrawn, settled, or otherwise resolved, and the retained amount shall be paid to whomever the parties to the grievance shall decide, or to whomever an Arbitrator shall so order.

13.9 Should any of the arbitrators listed in this Article or Article IV no longer work as a labor arbitrator, the District and the Council shall mutually agree to a replacement.

ARTICLE XIV
WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

14.1 The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of the Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

14.2 All jurisdictional disputes on this Project between or among the building and construction trades Unions and the Employers parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions parties to this Agreement.

14.3 If a dispute arising under this Article involves the Northern California Carpenters Regional Council or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the California State Building and Construction Trades Council in Sacramento, California, within fourteen (14) days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

14.4 All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individual employees violating this Section shall be subject to immediate discharge. Each Employer will conduct a pre-job conference with the Council prior to commencing work. The Project Manager and the District will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

ARTICLE XV
MANAGEMENT RIGHTS

15.1 Consistent with the Schedule A agreements, the Contractor(s)/Employer(s) shall retain full and exclusive authority for the management of their operations, including the right to direct their work force in their sole discretion. No rules, customs or practices shall be permitted or observed which limit or restrict production, or limit or restrict the working efforts of employees, except that lawful manning provisions in the Master Agreement shall be recognized.

15.2 Consistent with the Schedule A agreements, it is the responsibility of the Contractor(s)/Employer(s) to ensure safe working conditions on the Project and to notify employees of and ensure compliance with the applicable safety laws and regulations on the Project.

ARTICLE XVI
DRUG AND ALCOHOL TESTING

16.1 The use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms at any time during the work day is prohibited.

16.2 Drug and alcohol testing shall be conducted in accordance with the Substance Abuse Prevention Policies contained in the applicable Schedule A.

ARTICLE XVII
SAVINGS CLAUSE

17.1 The parties agree that in the event any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect. The parties further agree that if any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void, by a court of competent jurisdiction, the parties shall substitute, by mutual agreement, in its place and stead, an article, provision, clause, sentence or word which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.

17.2 The parties agree that in the event that a decision of a court of competent jurisdiction materially alters the terms of the Agreement such that the intent of the parties is defeated, then the entire Agreement shall be null and void.

17.3 If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the District from complying with all or part of its provisions and the District accordingly determines that the Agreement will not be required as part of an award to a Contractor/Employer, the Unions will no longer be bound by the provisions of Article IV.

ARTICLE XVIII
TERM

18.1 This Agreement shall be included in the bid documents, requests for proposals, or other equivalent Project solicitations, which shall indicate that entering into this Agreement is a condition of the award of Construction Contracts for the Project.

18.2 This Agreement shall become effective on the day it is executed by the District and by the Council.

18.3 This Agreement may be executed in counterparts, such that original signatures may appear on separate pages and when bound together all necessary signatures shall constitute an original. Faxed or emailed PDF signature pages transmitted to other parties to this Agreement shall be deemed the equivalent of original signatures.

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

By: _____ Date: 4/24/17

SANTA CLARA AND SAN BENITO COUNTIES BUILDING & CONSTRUCTION TRADES COUNCIL

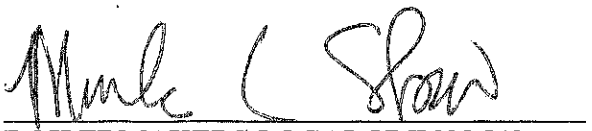
By: _____ Date: 4/5/17

Josué García, CEO

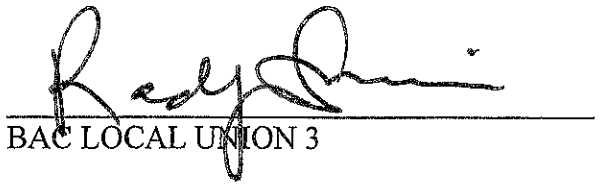
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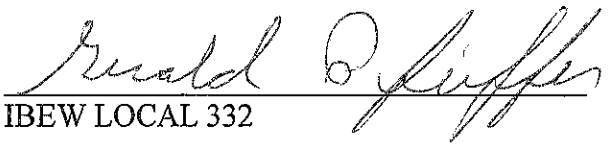
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BAC LOCAL UNION 3



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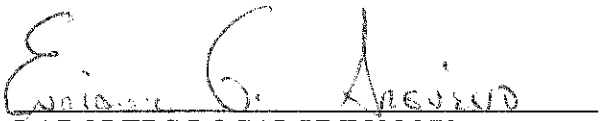


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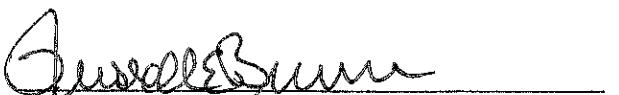
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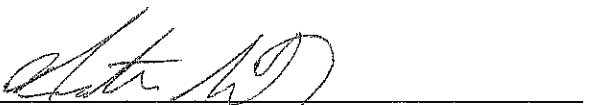
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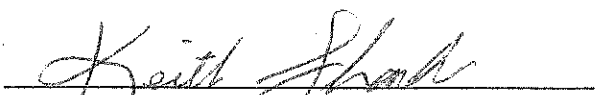
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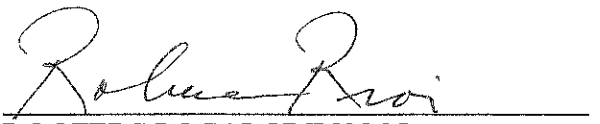
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OPERATIVE PLASTERERS AND CEMENT MASONS LOCAL UNION 400



PLASTERERS LOCAL UNION 300



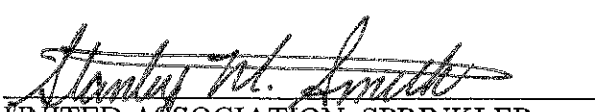
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UNITED ASOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 355



UNITED ASSOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 393



UNITED ASSOCIATION, SPRINKLER FITTERS LOCAL UNION 483



SHEET METAL WORKERS INTERNATIONAL UNION LOCAL 104

SIGNATURE BLOCKS FOR UNIONS

ASBESTOS WORKERS LOCAL 16

BOILERMAKERS LOCAL UNION 549

BAC LOCAL UNION 3

IBEW LOCAL 332

ELEVATOR CONSTRUCTORS LOCAL UNION 8

I.U.P.A.T. DISTRICT COUNCIL 16

IRON WORKERS LOCAL 377

LABORERS LOCAL UNION 270

OPERATING ENGINEERS LOCAL 3

OPERATIVE PLASTERERS AND CEMENT MASONS LOCAL UNION 400

PLASTERERS LOCAL UNION 300

ROOFERS LOCAL UNION 95

UNITED ASOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 355

UNITED ASSOCIATION, PLUMBERS & PIPEFITTERS LOCAL UNION 393

UNITED ASSOCIATION, SPRINKLER FITTERS LOCAL UNION 483

SHEET METAL WORKERS INTERNATIONAL UNION LOCAL 104

SIGN, DISPLAY AND ALLIED CRAFTS LOCAL UNION 510

NORTHERN CALIFORNIA CARPENTERS REGIONAL COUNCIL, FOR ITSELF AND ITS AFFILIATES

LABORERS LOCAL UNION 67

TEAMSTERS LOCAL UNION 287

Addendum A
Agreement to be Bound

[Addressee]
[Address]
[City and State]

Re: Alum Rock Union Elementary School District Community Workforce Agreement

Dear Mr./Ms. _____:

The undersigned party confirms that it agrees to be a party to and bound by the Alum Rock Union Elementary School District Community Workforce Agreement as such Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

By executing this **Agreement to be Bound**, the undersigned subscribes to, adopts and agrees to be bound by the written terms of the legally established trust agreements as set forth in Section 9.1, as they may from time to time be amended, specifying the detailed basis upon which contributions are to be made into, and benefits made out of, such trust funds and ratifies and accepts the trustees appointed by the parties to such trust funds. The undersigned agrees to execute a separate Subscription Agreement when such trust funds require such documents.

The obligation to be a party to and bound by this Agreement shall extend to all work covered by the Alum Rock Union Elementary School District Community Workforce Agreement undertaken by the undersigned. The undersigned shall require all of its subcontractors, of whatever tier, to become similarly bound for all their work within the scope of this Agreement by signing an identical Agreement to be Bound.

This letter shall constitute a subscription agreement, to the extent of the terms of the letter.

CONTRACTOR/SUBCONTRACTOR:_____

Contractor State License Number or Motor Carrier (CA) Permit Number:_____

Name of Authorized Person (print):_____

Signature of Authorized Person:_____

Title of Authorized Person:_____

Telephone Number of Authorized Person:_____

Address of Authorized Person:_____

State Public Works Registration Number: _____

Addendum B
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
TARGETED HIRING AGREEMENT

I. Purpose

As parties to the Alum Rock Union Elementary School District Community Workforce Agreement ("Agreement"), the Alum Rock Union Elementary School District ("District") and the Santa Clara & San Benito Counties Building Trades Council ("Council") recognize the mutual needs and the public interest in: (1) increasing training and career opportunities for District graduates, Targeted Workers and Underrepresented Workers in the construction trades through apprenticeship and pre-apprenticeship programs; and (2) developing a pipeline to ensure the continued availability of a skilled, qualified and readily available construction workforce for this and future construction Projects.

In furtherance of these goals, the District and the Council hereby agree to enter into this Targeted Hiring Agreement ("THA").

II. Definitions

All capitalized terms not defined in this THA are as defined in the Agreement.

Approved Pre-Apprenticeship Program. An Approved Pre-Apprenticeship Program means the Santa Clara County Trades Orientation Program or an equivalent structured, MC-3 certified pre-apprenticeship program; or a Union-sponsored program that serves Underrepresented Workers and is sponsored by Council-approved community based organizations ("CBOs"), the Council itself, affiliate(s) of the Council, the State Building & Construction Trades Council of California, or the North America Building & Construction Trades Council.

Community Workforce Coordinator. The Community Workforce Coordinator means the work2future Workforce Investment Board, or another entity as determined by mutual written agreement of the District and the Council. The Community Workforce Coordinator is responsible for maintaining an up-to-date list of Targeted Workers who are available for work with their current contact information, and will provide this list to any of the Parties upon request.

Covered Contractor. A Covered Contractor means a contractor performing $250,000 or more of Covered Work on a Project. A Covered Contractor is subject to the Workforce Goal. If a contractor performs less than $250,000 of Covered Work on a Project, that contractor is not subject to the Workforce Goal, but may nonetheless participate voluntarily in the Workforce Goal.

Targeted Worker. A Targeted Worker is an individual who has completed an Approved Pre-Apprenticeship Program. Prior to working on the Project, a Targeted Worker must be indentured in the applicable Joint Apprenticeship Training Program.

Underrepresented Worker. An Underrepresented Worker is an individual who, prior to commencing work, has at least one of the following barriers to employment: (1) is currently homeless; (2) is currently receiving public assistance; (3) is currently participating in a reentry program or was formerly incarcerated; (4) has been continuously unemployed for the previous one year; (5) has been emancipated from the foster care system; (6) is a veteran of the U.S. military; (7) is an at-risk youth; or (8) is a survivor of labor trafficking.

III. Hiring/Employment Obligations

Consistent with the Master Agreements of the Unions signatory to the Agreement, the Unions' hiring hall procedures, and the applicable Joint Apprenticeship Training Committee ("JATC") rules, standards and procedures, Covered Contractors shall make a good faith effort to meet the following Workforce Goal related to hiring and employment of workers on the Project.

Workforce Goal.

a) Consistent with the requirements of California Labor Code §§ 1776, 1777.5 and 1777.6, each Covered Contractor shall make a good faith effort to reach the goal of employing one (1) or more Targeted Worker(s) as First Year Apprentice(s) for at least 25% of the Covered Contractor's apprentice hours on the Project, unless the Contractor demonstrates to the Community Workforce Coordinator that the Targeted Worker(s) worked the maximum feasible hours, or shows other good cause. A Targeted Worker may be assigned to work on the Project or on another jobsite at the employer's discretion, provided that the worker is assigned to the same job classification that would apply to a Targeted Worker on the Project.

b) Nothing in this THA requires a Covered Contractor to hire a particular individual or to retain a particular individual in employment. In the event that a Targeted Worker is hired by a Covered Contractor but does not complete the requisite hours of employment in Section III(a), the Covered Contractor shall make a good faith effort to meet the "Alternate Method to Satisfy Workforce Goal" set forth in Part IV of this THA.

c) The Community Workforce Coordinator will, upon request, refer names of qualified, available and willing Targeted Workers to the Union and/or Covered Contractor(s).

d) The Unions agree to cooperate with Covered Contractor(s) in providing available apprentices as requested. All apprentices shall be properly supervised and paid in accordance with provisions contained within the Master Agreements.

e) In the event that the Community Workforce Coordinator is unable to refer sufficient qualified, available and willing Targeted Workers, this section shall not apply until such time as qualified, available and willing Targeted Workers are available for hire.

f) The Unions agree to cooperate with the District and CBOs designated by mutual agreement of the District and the Council in conducting outreach activities to recruit and refer Underrepresented Worker applicants to Approved Pre-Apprenticeship Programs for which they are qualified or qualifiable.

g) Covered Contractors shall maintain electronic records documenting the employment of and hours worked by Targeted Worker(s), and provide such records to the General Contractor, the District or the Community Workforce Coordinator upon request.

IV. Alternate Method to Satisfy Workforce Goal

Covered Contractors who fail to make good faith efforts to meet the Workforce Goal in Part III of this THA may also satisfy the Workforce Goal by demonstrating they have accomplished ***all*** of the following, subject to the applicable Master Agreement(s), hiring hall procedures, JATC procedures and standards approved by the Division of Apprenticeship Standards of the California Department of Industrial Relations.

Alternate Method.

a) Make good faith efforts to employ least one (1) first-year apprentice on the Project (or for equivalent work on another jobsite, provided that the apprentice is assigned to the same job classification that the apprentice would have performed on the Project).

b) Submit a Craft Request Form to the Community Workforce Coordinator offering the opportunity to provide qualified, available and willing individuals with employment consideration for first-year apprentice positions.

c) Submit a Craft Request Form to the applicable Union(s) requesting the dispatch of qualified, willing and available individuals referred by the Community Workforce Coordinator by name.

d) Contact the Community Workforce Coordinator and provide the following information for all first-year apprentice job openings on the Project:

i. a description of the job, including the trade and any job requirements, such as specific qualifications or skills;
ii. the person's name and telephone number at the Covered Contractor's business who will be responsible for answering questions regarding the job opening; and
iii. a description of how applicants should apply for the job.

V. Consequences of Non-Compliance

The District and the Council shall oversee compliance monitoring through a Memorandum of Understanding with Working Partnerships. The Joint Administrative

Committee formed by Section 5.4 of the Agreement shall consider allegations of non-compliance by a Covered Contractor. If there is a determination by the JAC that a Covered Contractor has failed to make good faith efforts to meet the Workforce Goal ***and*** failed to satisfy the Alternate Method, this issue will be referred to the grievance procedure set forth in Article XIII of the Agreement. At any time during the process of compliance review, the JAC shall have the authority to reach a resolution with the Covered Contractor.

VI. Implementation

The JAC shall assist with implementation of and monitoring compliance with the terms of this THA.

AMENDMENT NO. 1
to the
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
COMMUNITY WORKFORCE AGREEMENT

Preamble

This Amendment is made and entered into on this 11 day of August, 2023 by and between the Alum Rock Union Elementary School District ("District") and the Santa Clara & San Benito Counties Building and Construction Trades Council, AFL-CIO ("Council"), on behalf of itself and its affiliated local Unions that have authorized the Council to enter into this Amendment ("Unions").

Recitals

Whereas, a Community Workforce Agreement ("Agreement") was entered into on April 5, 2017 by and between the District, the Council, the signatory Unions, and the contractors and/or subcontractors that have become or shall become signatory to the Agreement by signing the "Agreement to be Bound" thereto; and

Whereas, the Agreement applies to projects funded by the District's Measure I and J bonds; and

Whereas, the District has continued to experience positive benefits from the Agreement and from an ongoing relationship with the Council and its affiliated local Unions; and

Whereas, the residents of the District area voted in favor of a new bond called Measure S, which reauthorizes the remaining $71.5 million in Measure J bonds previously authorized by District voters to fund the modernization, renovation, repair, and updating of District facilities; and

Whereas, the parties to the Agreement now mutually desire to amend the Agreement to apply the Agreement to projects funded in whole or in part by Measure S; and

NOW, THEREFORE, IT IS HEREBY AGREED BETWEEN AND AMONG THE PARTIES TO AMEND THE AGREEMENT AS FOLLOWS:

1) The second paragraph of the Agreement is hereby amended and fully restated as follows:

   The purpose of this Agreement is to promote the efficiency of construction operations for the District through the use of skilled labor resulting in quality construction outcomes, and to provide for the peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring the timely and economical completion of Projects funded by proceeds from Measure I, Measure J, and/or Measure S bonds.

2) Section 1.9 of the Agreement is hereby amended and fully restated as follows:

"Project" means all District construction projects paid for in whole or in part out of Measure I, Measure J, and/or Measure S funds. The District and the Council may mutually agree in writing to add additional components to the Project's scope of work covered by this Agreement. Although "Project" is used throughout this Agreement in the singular, it applies to all projects as defined in this Section.

3) Other than as explicitly set forth herein, this Amendment No. 1 shall make no other changes, amendments, modifications, additions or deletions to the Agreement.

4) This Amendment No. 1 shall become effective when the District's governing board ratifies this Amendment No. 1 and it is executed by the District and the Council.

5) This Amendment No. 1 shall be attached to and included with the Agreement for all intents and purposes, including all bid solicitations or similar documents issued by the District, and shall continue in full force and effect until completion of the Project(s) as defined therein.

Dated: August 26th 2023

SANTA CLARA & SAN BENITO COUNTIES BUILDING & CONSTRUCTION TRADES COUNCIL

David Bini

David Bini
Executive Director

Dated: August 25, 2023

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

Name: Koluiva Chheng
Title: Asst. Supt., Bus. Svcs.

L.U.C.H.A ELEMENTARY SCHOOL

PLAY STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET, SAN JOSE, CA 95116

ALUM ROCK UNION SCHOOL DISTRICT

DSA File No. 43-04
App. No. 01-121121
PTN. 69369-97

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HC2020-2	CONNECTION DETAILS
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TOTAL SHEET COUNT: 26

PROJECT DIRECTORY

CLIENT
ALUM ROCK SCHOOL DISTRICT

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY STREET
SAN JOSE, CA
[T] (408) 928-6872
ED VILLARREAL
Ed.Villarreal@arusd.org

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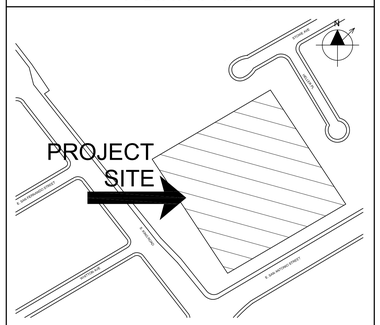
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CIVIL ENGINEER
NORTHSTAR

ROSS SIMMONS, SENIOR ENGINEER
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CHICO, CA 95926
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RSimmons@Northstarae.com

VICINITY MAP



DSA REQUIREMENTS

1. ALL WORK SHALL CONFORM TO THE 2022 EDITION OF THE TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
2. AS A FACILITY WHICH COMES UNDER THE APPROVAL AND AUTHORITY OF THE DIVISION OF THE STATE ARCHITECT (DSA), THIS PROJECT IS SUBJECT TO DRAWING AND JOB SITE REVIEW BY A REPRESENTATIVE OF DSA.
3. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS AFFECTING FLS, SSS, AND/OR ACS SHALL BE MADE BY ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR AND DSA IR A-6.
4. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24 C.C.R.
5. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
6. A COPY OF PART 1 TO PART 5 OF TITLE 24 SHALL BE KEPT AND BE AVAILABLE IN THE FIELD DURING CONSTRUCTION.
7. DSA SHALL BE NOTIFIED OF THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24, CCR
8. THE DIVISION OF THE STATE ARCHITECT IS EXEMPT FROM ARBITRATION OR MEDIATION PROCEDURES.
9. SUPERVISION BY THE DIVISION OF THE STATE ARCHITECT IS REQUIRED PER SECTION 4-334, PART 1, TITLE 24, CCR.
10. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, CCR:
    - VERIFIED REPORTS PER SECT 4-336; PART 1, TITLE 24 CCR
    - DUTIES OF ARCHITECT PER SECT 4-331, 4-341; PART 1, TITLE 24 CCR
    - DUTIES OF CONTRACTOR PER SECT. 4-343; PART 1, TITLE 24
11. TESTING AND INSPECTION:
    - INSPECTOR APPROVED BY DSA AS PER SECT. 4-333(D); PART 1, TITLE 24, CCR
    - TESTS AND TESTING LABORATORIES PER SECT 4-335
    - SPECIAL INSPECTION PER SECT. 4-333(C)
12. CHANGES IN LEVEL FOR FLOOR FINISHES SHALL CONFORM WITH CBC SECTION 11B-303.
13. ALL TESTS TO CONFORM TO REQUIREMENTS OF SECTION 4-335; PART 1, TITLE 24, CCR
14. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335; PART 1, TITLE 24, CCR AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS FOR RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
15. INSPECTOR SHALL BE APPROVED BY DSA CLASS 3. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B).
16. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR)
17. INSPECTOR OF RECORD REQUIREMENTS:
    - A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTOR'S DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24; PART 1 AND IN ADDITION, SHALL BE STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8.
    - B. INSPECTOR SHALL BE CERTIFIED AS A CLASS 3 INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPECTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.

DEFERRED APPROVALS

NONE

CODES AND REGULATIONS

LIST OF APPLICABLE CODES
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

PROJECT DESCRIPTION

APN: 481-17-018
PROPERTY ADDRESS: 1711 E. SAN ANTONIO STREET
CITY & ZIP: SAN JOSE, 95116
TAX RATE AREA: 17-162

SCOPE OF WORK:

PROJECT INCLUDES INSTALLATION OF NEW PLAY STRUCTURE, INTEGRATED 26 DIAMETER, 12' X 12' AND PC SHADE STRUCTURE ALONG WITH NEW GROUND SURFACE AND PATH OF TRAVEL UPGRADES, WHICH INCLUDE REMOVING AND REPLACING AREAS OF CONCRETE WALK ALONG PATH OF TRAVEL FROM ACCESSIBLE PARKING TO UNISEX ADULT RESTROOMS, BOYS AND GIRLS RESTROOMS, DRINKING FOUNTAIN AND PROPOSED PLAY STRUCTURE.
AND STAFF GENDER RESTROOM AT CLASSROOM B

STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS,
INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

Application No. 01-121121
File No. 43-04
The drawings or sheets listed on the cover or index sheet
have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings In this state. It has been examined by me for:

1. design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2. coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344" of Title 24, Part 1. (Title 24, Part 1, Section 4-316 [b])

I find that:
[X] All drawings or sheets listed on the cover or index sheet
[ ] This drawing or page

[X] is/are in general conformance with the project design and
[X] has/have been coordinated with the project plans and specifications

Signature — *04.12.2024 Date*

Architect or Engineer designated to be in general responsible charge.

Brian P. Whitmore
Print Name

C 30345 — ***License Number***
09-30-2025 — ***Expiration Date***

STATEMENT OF GENERAL CONFORMANCE AND SIGNATURE BLOCK PER IR A-18

LIST OF PATH OF TRAVEL UPGRADES

1. (E) ACCESSIBLE PARKING UPGRADE:
   PARKING STALL RESTRIPING
2. (E) PATH OF TRAVEL UPGRADE:
   AREAS OF CONCRETE WALK ALONG PATH OF TRAVEL TO (E) RESTROOMS, DRINKING FOUNTAINS AND PLAY STRUCTURE

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

STUDIO W ARCHITECTS

Studio W Architects
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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRIAN P WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA — DATE SIGNED: 04/12/2024	

GENERAL NOTES

1. This sheet is part of a set and is not to be used alone.
2. This sheet is not to be used for construction unless the architect's stamp and signature appear on the drawings and the status box indicated drawings have been released for construction.
3. These plans and prints thereof, as instruments of service, are owned by the architect and are for use on this project only. Reproduction and/or distribution without the prior written consent of the architect is forbidden.
4. Copyright Studio W Associates, Inc. 2023.

REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS — DATE

- ○ DSA PLAN CHECK
- ○ DSA BACK CHECK
- ○ BIDDING
- ○ CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

COVER SHEET

Date	Project Number
07/27/2023	23013
Application Number	Drawing Number
01-121121	A0.1
Drawn KT	
Author DH	

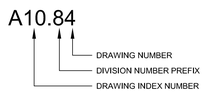
DRAWING DISCIPLINE PREFIX

A. ARCHITECTURAL
C. CIVIL
D. INTERIOR DESIGN / FURNITURE
E. ELECTRICAL
FA. FIRE SPRINKLER SYSTEM
FP. FIRE PROTECTION
FS. DIETARY / FOOD SERVICE
G. GRAPHICS
H. HAZARDOUS MATERIALS
L. LANDSCAPING
M. MECHANICAL
P. PLUMBING
S. STRUCTURAL
T. TELECOMMUNICATION

DRAWING INDEX CODE

A0. GENERAL INFORMATION
A1. SITE PLANS
A2. FLOOR PLANS
A3. REFLECTED CEILING PLANS
A4. ROOF PLANS
A5. EXTERIOR ELEVATIONS
A6. BUILDING SECTIONS
A7. ENLARGED PLANS
A8. INTERIOR ELEVATIONS
A9. SCHEDULES
A10.. CONSTRUCTION DETAILS

DETAIL DRAWING CODE



THE DIVISION PREFIX NUMBERS ARE THOSE IDENTIFIED BY THE 48 DIVISION GROUPING SYSTEM OF MASTERFORMAT AS PUBLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) AND SHALL NOT BE SOLELY REPRESENTATIVE OF REQUIREMENTS FOR ANY ONE DIVISION. THOSE DIVISIONS NOTED AS BEING OMITTED ARE NOT APPLICABLE OR ARE INCLUDED UNDER DISCIPLINE DRAWINGS.

IN CASE OF DISCREPANCY BETWEEN THE INDEX AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.

DIVISION NUMBER CODE

MASTERFORMAT NUMBERS AND TITLES AS PUBLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI).

DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS
DIVISION 01 GENERAL REQUIREMENTS
DIVISION 02 EXISTING CONDITIONS
DIVISION 03 CONCRETE
DIVISION 04 MASONRY
DIVISION 05 METALS
DIVISION 06 WOODS, PLASTICS, AND COMPOSITES
DIVISION 07 THERMAL AND MOISTURE PROTECTION
DIVISION 08 OPENINGS
DIVISION 09 FINISHES
DIVISION 10 SPECIALTIES
DIVISION 11 EQUIPMENT
DIVISION 12 FURNISHINGS
DIVISION 13 SPECIAL CONSTRUCTION
DIVISION 14 CONVEYING EQUIPMENT
DIVISION 21 FIRE SUPPRESSION
DIVISION 22 PLUMBING
DIVISION 23 HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)
DIVISION 25 INTEGRATED AUTOMATION
DIVISION 26 ELECTRICAL
DIVISION 27 COMMUNICATIONS
DIVISION 28 ELECTRONIC SAFETY AND SECURITY
DIVISION 31 EARTHWORK
DIVISION 32 EXTERIOR IMPROVEMENTS
DIVISION 33 UTILITIES
DIVISION 34 TRANSPORTATION
DIVISION 35 WATERWAY AND MARINE CONSTRUCTION
DIVISION 40 PROCESS INTERCONNECTIONS
DIVISION 41 MATERIAL PROCESSING AND HANDLING EQUIPMENT
DIVISION 42 PROCESS HEATING, COOLING, AND DRYING EQUIPMENT
DIVISION 43 PROCESS GAS AND LIQUID HANDLING, PURIFICATION, AND STORAGE EQUIPMENT
DIVISION 44 POLLUTION AND WASTE CONTROL EQUIPMENT
DIVISION 45 INDUSTRY-SPECIFIC MANUFACTURING EQUIPMENT
DIVISION 46 WATER AND WASTEWATER EQUIPMENT
DIVISION 48 ELECTRICAL POWER GENERATION

GENERAL NOTES

1. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AND SHALL HAVE VISITED THE CONSTRUCTION SITE, HE SHALL BE FAMILIAR WITH THE CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THIS CONTRACT. THE GENERAL CONTRACTOR SHALL NOT DISPUTE, COMPLAIN OR ASSERT THAT THERE IS ANY MISUNDERSTANDING IN REGARDS TO LOCATION, EXTENT, NATURE OR AMOUNT OF WORK TO BE PERFORMED UNDER THIS CONTRACT DUE TO THE CONTRACTOR'S FAILURE TO INSPECT THE SITE. BIDDERS SHALL NOTIFY THE ARCHITECT OF ANY VALUE ENGINEERING WORK, WHICH ARE NOT COVERED IN THE CONTRACT DOCUMENTS.
2. THERE WILL BE NO SUBSTITUTION FOR SPECIFIED ITEMS WITHOUT PRIOR APPROVAL UNLESS OTHERWISE NOTED. REQUESTS FOR SUBSTITUTIONS SHALL BE MADE IN ACCORDANCE WITH GENERAL CONDITIONS & DIVISION 1
3. THE GENERAL BUILDING CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS REQUIRED BY GOVERNING AGENCIES IN ORDER TO PERFORM THIS WORK.
4. THE FINAL LOCATION OF ALL ELECTRICAL AND SIGNAL EQUIPMENT, PANEL BOARDS, FIXTURES, ETC., SHALL BE APPROVED BY OWNER PRIOR TO INSTALLATION.
5. DEFINITIONS
   A. "TYPICAL" MEANS IDENTICAL FOR ALL CONDITIONS, UNLESS OTHERWISE NOTED.
   B. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATIONS.
   C. "PROVIDE" MEANS TO FURNISH AND INSTALL.
   D. "FURNISH" MEANS TO FURNISH AND OTHERS WILL INSTALL.
6. DIMENSIONING RULES:
   A. ALL HORIZONTAL DIMENSIONS SHALL BE TO FACE OF STUD OR TO CENTERLINE OF COLUMN GRID LINE, U.O.N
   B. DIMENSIONS NOTED "CLEAR", "CLR", OR "MINIMUM" MUST BE PRECISELY MAINTAINED.
   C. DIMENSIONS CAN NOT BE MODIFIED WITHOUT APPROVAL OF THE ARCHITECT UNLESS OTHERWISE NOTED.
   D. VERTICAL DIMENSIONS ARE FROM TOP OF FLOOR SLAB UNLESS OTHERWISE NOTED.
   E. DO NOT SCALE DRAWINGS. IF ANY ITEM OF WORK CANNOT BE LOCATED, DO NOT PROCEED WITH THE WORK WITHOUT THE ARCHITECT'S APPROVAL.
   F. DIMENSIONS MARKED "V.I.F." OR "VERIFY" SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
   G. VERIFY ALL ROUGH OPENING DIMENSIONS FOR FABRICATED ITEMS WITH THE MANUFACTURER PRIOR TO PROCEEDING WITH CONSTRUCTION.
   H. DOOR AND WINDOW OPENINGS SHALL BE LOCATED ADJACENT TO PERPENDICULAR WALL UNLESS DIMENSIONED OTHERWISE.
7. PROVIDE REQUIRED BACKING, BLOCKING, AND BRACING FOR ALL WALL -MOUNTED FIXTURES, ACCESSORIES AND EQUIPMENT.
8. VERIFY AND COORDINATE WALLS THAT MAY REQUIRE NON-TYPICAL THICKNESS OR FRAMING DUE TO ELECTRICAL, MECHANICAL, PLUMBING, STRUCTURAL AND/OR EQUIPMENT REQUIREMENTS.
9. ALL GLAZING SHALL CONFORM TO FEDERAL GLAZING REGULATIONS AND CHAPTER 24, CBC.
10. ALL CONTRACTORS SHALL REMOVE TRASH AND DEBRIS STEMMING FROM THEIR WORK ON A DAILY BASIS. PROJECT SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY CONDITION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL LEFT-OVER MATERIALS, DEBRIS, TOOLS AND EQUIPMENT INVOLVED IN HIS/HER OPERATIONS AT THE CONCLUSION OF THE INSTALLATION. HE/SHE SHALL LEAVE ALL AREAS CLEAN AND FREE FROM DUST.
12. HAZARDOUS MATERIALS: THE ARCHITECT AND THE ARCHITECT'S CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, DISPOSAL OF OR EXPOSURE OF PERSONS TO ASBESTOS OR HAZARDOUS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. PROFESSIONAL SERVICES RELATED OR IN ANY WAY CONNECTED WITH THE INVESTIGATION, DETECTION, ABATEMENT, REPLACEMENT, USE, SPECIFICATION, OR REMOVAL OF PRODUCTS, MATERIALS, OR PROCESSES CONTAINING ASBESTOS OR HAZARDOUS OR TOXIC MATERIALS ARE BEYOND THE SCOPE OF THIS AGREEMENT.
13. THE GENERAL CONTRACTOR & SUBCONTRACTORS ARE RESPONSIBLE FOR LOCATING & VERIFYING ALL EXISTING UNDERGROUND UTILITIES IN ALL AREAS OF NEW WORK PRIOR TO COMMENCEMENT OF EXCAVATION. EXISTING UTILITIES SHOWN ON THE DRAWING ARE APPROXIMATE ROUTING LOCATION AS BEST DETERMINED FROM EXISTING DRAWINGS AND THE SCHOOL DISTRICT, BUT SHOULD NOT BE CONSTRUED TO REPRESENT ALL THE EXISTING UNDERGROUND UTILITIES.
14. ALL TEMPORARY WORK SHALL BE CONSIDERED A PART OF THIS CONTRACT AND NO EXTRA CHARGES WILL BE ALLOWED. THIS SHALL INCLUDE MINOR ITEMS OF MATERIAL OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS AND INTENT OF THE PROJECT.
15. ALL WALL PENETRATIONS TO EXTERIOR WALLS SHALL BE SEALED AIR/WATER TIGHT. ALL INTERIOR PENETRATIONS SHALL BE SEALED TO PROVIDE A PROFESSIONAL AND FINISHED APPEARANCE.
16. THE DRAWINGS AND SPECIFICATIONS DO NOT UNDERTAKE TO SHOW OR LIST EVERY ITEM TO BE PROVIDED, BUT RATHER TO DEFINE THE REQUIREMENTS FOR A FULL AND WORKING SYSTEM FROM THE STANDPOINT OF THE END USER. FOR THIS REASON, WHEN AN ITEM NOT SHOWN OR LISTED IS CLEARLY NECESSARY FOR PROPER USE CONTROL/ OPERATION OF EQUIPMENT WHICH IS SHOWN OR LISTED, PROVIDE ALL ITEMS WHICH WILL ALLOW THE SYSTEM TO FUNCTION PROPERLY AT NO INCREASE IN CONTRACT PRICE ON TIME.
17. THE DETAILS REFLECT THE DESIGN INTENT FOR TYPICAL CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND SHALL INCLUDE, IN HIS SCOPE, THE COST FOR COMPLETE FINISHED INSTALLATIONS, INCLUDING ANOMALIES, OF ALL TRADES.
18. ALL WORK SHALL CONFORM TO CALIFORNIA CODES, TRADE STANDARDS WHICH GOVERN EACH PHASE OF THE PROJECT, AND ALL APPLICABLE LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
19. THIS DRAWING SET SHALL BE USED IN CONJUNCTION WITH THE CSI FORMAT PROJECT MANUAL PUBLISHED IN BOOK FORM, COMBINED, THEY ARE THE "CONTRACT DOCUMENTS".
20. NO WORK SHALL COMMENCE WITH UNAPPROVED MATERIALS. ANY WORK DONE WITH UNAPPROVED MATERIALS AND EQUIPMENT IS AT THE CONTRACTOR'S RISK. SEE SPECIFICATIONS FOR SUBMITTAL AND SUBSTITUTION REQUIREMENTS.
21. CONSTRUCTION MATERIAL STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE OR DETERIORATION. FAILURE IN THIS REGARD MAY BE CAUSE FOR REJECTION OF MATERIAL AND/OR WORK. SECURITY OF MATERIALS ARE THE SOLE RESPONSIBILITY OF CONTRACTOR.
22. ALL EQUIPMENT/CABINETS SHALL BE FABRICATED FROM FIELD VERIFIED DIMENSIONS AND APPROVED SHOP DRAWINGS. COORDINATE MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT WITH THIS WORK.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE AND COSTS ATTRIBUTED TO RAIN WATER DAMAGE DURING THE DURATION OF THIS PROJECT.
24. PROTECT AREAS FROM DAMAGE WHICH MAY OCCUR DUE TO TEMPERATURES, WIND, DUST, WATER, ETC. PROVIDE AND MAINTAIN TEMPORARY BARRICADES, CLOSURE WALLS, ETC., AS REQUIRED DURING CONSTRUCTION.
25. MAINTAIN EXISTING PEDESTRIAN ACCESS ALONG EXISTING ADJACENT STREETS.
26. ALL PUBLIC IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE LATEST ADOPTED CITY/COUNTY STANDARDS.
27. ALL TYPICAL DETAILS SHALL APPLY UNLESS NOTED OTHERWISE.
28. NOTIFY THE ARCHITECT IN WRITING AND SEEK CLARIFICATION IF ANY DISCREPANCIES OR OMISSIONS ARE FOUND. CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIAL WORK IF RELATED WORK IS CONTINUED AFTER A DISCREPANCY IS IDENTIFIED.
29. NEW FINISHES AND CONSTRUCTION SHALL BE PROTECTED BY THE CONTRACTOR FROM POTENTIAL DAMAGE CAUSED BY CONSTRUCTION ACTIVITY. DAMAGE TO FINISHES OR CONSTRUCTION SHALL BE REPAIRED OR REPLACED (OWNER'S DECISION) BY THE CONTRACTOR WITH IDENTICAL MATERIAL AND/OR FINISHES. CONTRACTOR SHALL MAKE AND MAINTAIN A PHOTOGRAPHIC RECORD NOTEBOOK WITH DATED/INDEXED PHOTOGRAPHS.
30. SEE ELECTRICAL DRAWINGS FOR INFORMATION RELATED TO TELECOMMUNICATION EQUIPMENT, POWER, AND LIGHTING FIXTURES AND EQUIPMENT. SEE ARCHITECTURAL PLANS, REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS FOR COORDINATED EQUIPMENT LOCATIONS. IF NOT SHOWN, CONTACT ARCHITECT FOR REVIEW AND DECISION.
31. PROVIDE ACCESS DOORS REQUIRED FOR ACCESS TO CONCEALED MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT.
32. ALL NOTED WORK IS UNDERSTOOD TO BE NEW, UNLESS LABELED AS "(E)" OR "EXISTING"
33. MATERIALS AND THEIR INSTALLATION SHALL COMPLY WITH APPLICABLE CODES, STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
34. EXISTING ACCESSIBLE ROUTES TO ALL FACILITIES AND BUILDING THAT ARE OPERATIONAL DURING CONSTRUCTION PHASE SHALL REMAIN UNOBSTRUCTED, SAFE AND USABLE BY PEOPLE WITH DISABILITIES.
35. "N.I.C." (NOT INCLUDED IN CONTRACT) ITEMS SHOWN IN PLANS, IF APPLICABLE, MUST BE SUBMITTED UNDER A SEPARATE APPLICATION FOR REVIEW AND APPROVAL, IF NOT EXEMPTED BY DSA IR A-22.
36. PER CBC SECTION 11B-401 "ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT STATED AS A RANGE WITH SPECIFIC MINIMUM AND MAXIMUM END POINTS"
   A) WHERE CODE SPECIFIES A MAXIMUM OR MINIMUM DIMENSION, THE DIMENSION INDICATED ON THE PLANS NEED TO BE:
      - AS MAXIMUM OR MINIMUM ACCORDINGLY OR
      - PROVIDE ABSOLUTE DIMENSION THAT EXCEEDS CODE MINIMUM OR MAXIMUM REQUIREMENTS WITH APPROPRIATE INDUSTRY CONSTRUCTION TOLERANCE.
   B) WHERE CODE SPECIFIES A DIMENSION AS A RANGE THE DIMENSION INDICATED ON THE PLANS SUGGESTED TO BE:
      - AS RANGE PER CODE OR
      - ABSOLUTE MID-RANGE CODE PRESCRIBED DIMENSION.

SUPPLEMENTAL GENERAL NOTES

1. THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
2. LOCATIONS OF ALL UTILITIES SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THIS SITE TO AVOID INTERCEPTING EXISTING PIPING OR CONDUITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT AND TO PROTECT THEM FROM DAMAGE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY UNIDENTIFIED CONDITIONS BE DISCOVERED. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
3. THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF STUDIO W ARCHITECTS, AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF STUDIO W ARCHITECTS.
4. EACH BIDDER SHALL POSSESS AT THE TIME OF BID, A CLASS B OR THE APPROPRIATE CLASS C CONTRACTOR'S LICENSE PURSUANT TO PUBLIC CONTRACT CODE SECTION 3300 AND BUSINESS AND PROFESSIONS CODE SECTION 7028.15. THE SUCCESSFUL BIDDER MUST MAINTAIN THE LICENSE THROUGHOUT THE DURATION OF THIS CONTRACT.
5. FIRE SAFETY DURING CONSTRUCTION & DEMOLITION:
   A. GENERAL: FIRE SAFETY DURING COMSTRUCTION SHALL COMPLY WITH 2022 CALIFORNIA FIRE CODE (CFC) CH. 33 (PART 9, TITLE 24 CCR).
   B. CONSTRUCTION SAFEGUARDS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CBC 3302.
   C. DEMOLITION: SHALL COMPLY WITH APPLICABLE PROVISION OF CBC 3303.
   D. BUILDING ACCESS: ACCESS TO BUILDINGS FOR THE PURPOSE OF FIREFIGHTING SHALL BE PROVIDED CONSTRUCTION MATERIAL SHALL NOT BLOCK ACCESS TO BUILDINGS, HYDRANTS OR FIRE APPLIANCES PER CBC 3308.1.
   E. MEANS OF EGRESS: SHALL COMPLY WITH APPLICABLE PROVISION OF CBC 3310.
   F. WATER SUPPLY: APPROVED WATER SUPPLY SHALL BE MADE AVAILABLE IN ACCORDANCE WITH CBC 3313.
   G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL PER CBC 3314.
6. PENETRATIONS IN FIRE RATED MATERIALS OR ASSEMBLIES SHALL BE RESTORED TO EQUAL RATING. FIRE STOP SYSTEMS AS LISTED BY UNDERWRITERS LABORATORIES SHALL BE INSTALLED PER FIRE RESISTANCE DIRECTORY. FIRE STOP SYSTEMS SHALL BE AS SPECIFIED.
7. NONRESIDENTIAL ENERGY STANDARDS COMPLIANCE STATEMENT (TITLE 24, PART 6):
   A. THE DESIGN INDICATED HEREIN COMPLIES WITH THE REQUIREMENTS OF THE ENERGY CONSERVATION STANDARDS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THE PROPOSED BUILDINGS WILL BE IN COMPLIANCE WITH THE ENERGY CONSERVATION STANDARDS PROVIDED THEY ARE BUILT ACCORDING TO THESE DRAWINGS AND SPECIFICATIONS AND PROVIDED ANY FUTURE IMPROVEMENTS ARE COMPLETED ACCORDING TO THE REQUIREMENTS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THESE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED TO INCLUDE ALL SIGNIFICANT ENERGY CONSERVATION FEATURES REQUIRED FOR COMPLIANCE WITH THE STANDARDS. BUILDING AREAS THAT ARE UNCONDITIONED AND/OR NOT SUBJECT TO THE STANDARDS ARE INDICATED ON THE DRAWINGS.
   B. ENVELOPE MANDATORY MEASURES:
      B.A. INSTALLED INSULATING MATERIALS SHALL HAVE BEEN CERTIFIED BY THE MANUFACTURER TO COMPLY WITH THE CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL.
      B.B. INSTALLED INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF TITLE 24, PART 2, CALIFORNIA CODE OF REGULATIONS, SECTIONS 719
      B.C. ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL AND OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED.
      B.D. SITE CONSTRUCTED DOORS, WINDOWS, AND SKYLIGHTS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHERSTRIPPED (EXCEPT FOR UNFRAMED GLASS DOORS AND FIRE DOORS).
      B.E. MANUFACTURED DOORS AND WINDOWS INSTALLED SHALL HAVE AIR INFILTRATION RATES CERTIFIED BY THE MANUFACTURER IN ACCORDANCE WITH TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS, SECTION 116(a)1.
      B.F. MANUFACTURED FENESTRATION PRODUCTS IN THE ENVELOPE OF THE BUILDING, INCLUDING, BUT NOT LIMITED TO, WINDOWS, SLIDING GLASS DOORS, FRENCH DOORS, SKYLIGHTS, CURTAIN WALLS, AND GARDEN WINDOWS MUST BE LABELED FOR U-VALUE IN ACCORDANCE WITH THE (NFRC) NATIONAL FENESTRATION RATING COUNCIL'S INTERIM U-VALUE RATING PROCEDURE.
      B.G. DEMISING WALL INSULATION SHALL BE INSTALLED IN ALL OPAQUE PORTIONS OF FRAMED WALLS (EXCEPT DOORS).
8. PROOF LOAD TESTS FOR EXPANSION TYPE ANCHOR BOLTS:
   A. ANCHOR DIAMETER REFERS TO THE THREAD SIZE FOR THE WEDGE CATEGORY AND TO THE ANCHOR OUTSIDE DIAMETER FOR THE SLEEVE CATEGORY.
   B. APPLY PROOF TEST LOADS TO WEDGE & SLEEVE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TORQUE WRENCH AND APPLY LOAD.
   C. FOR SLEEVE INTERNALLY THREADED CATEGORIES, VERIFY THAT THE ANCHOR IS NOT PREVENTED FROM WITHDRAWING BY A BASEPLATE OR OTHER FIXTURES. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE FIXTURE(S) PRIOR TO TESTING.
   D. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY THE FIXTURE(S).
   E. TEST EQUIPMENT IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
   F. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
      1. HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE. DROP-IN ANCHORS ARE ONLY TO BE TESTED WITH THIS METHOD.
      2. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITH THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT, ONE-QUARTER (1/4) TURN OF THE NUT FOR THE 3/8 IN. SLEEVE ANCHOR ONLY.
   G. TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS.
   H. ALL ANCHOR BOLTS OF THE EXPANSION TYPE (LOADED IN EITHER PULLOUT OR SHEAR) SHALL HAVE 50 PERCENT OF THE BOLTS (ALTERNATE BOLTS IN ANY GROUP ARRANGEMENT ALLOWED BY THE TYPE OF SUBSTRATE AND DIAMETER OF BOLT LISTED BELOW UNDER TEST VALUES TABLE) PROOF TESTED IN TENSION TO TWICE THE ALLOWABLE TENSION LOAD. IF THERE ARE ANY FAILURES, THE IMMEDIATELY ADJACENT BOLTS MUST THEN ALSO BE TESTED. TESTING SHALL BE PERFORMED IN ACCORDANCE WITH TITLE 24, PART 2, SECTION 1916A.8. 1
   I. ALL BOLTS MUST HAVE ICC APPROVAL.
   J. ALL ANCHOR BOLTS OF THE EXPANSION TYPE SHALL BE ONE OF THE FOLLOWING:
      1. HILTI KB-TZ2 ANCHOR ICC NO. ESR 4266
      2. ITW RAMSET/REDHEAD-WEDGE ANCHOR-ICC NO. ESR 2427

MINIMUM TEST VALUES			
NORMAL WEIGHT OR LIGHTWEIGHT CONCRETE			
ANCHOR	WEDGE		
DIA. (IN)	TENSION LOAD (LBS)	TORQUE (FT-LBS)	EFFECTIVE MIN. EMBEDMENT
3/8	6,500	25	1 1/2" - 2 3/4"
1/2	10,705	40	2" - 3 1/4"
5/8	17,170	60	3 1/8" - 4 3/4"
3/4	25,120	110	3 1/4" - 4 3/4"

9. POWDER-DRIVEN CONCRETE FASTENERS:
   A. GENERAL: USE OF POWDER DRIVEN CONCRETE FASTENERS FOR TENSION LOADS IS LIMITED TO SUPPORT OF MINOR LOADS LIKE ACOUSTICAL CEILINGS, DUCT WORK, CONDUIT.
   B. ALLOWABLE LOADS: IN GENERAL, LOADS SHOULD BE LIMITED TO LESS THAN 100 POUNDS. HOWEVER GREATER LOADS MAY BE PERMITTED FOR SPECIAL CASES WHEN APPROVED BY THE CHECKING SUPERVISOR OR FIELD ENGINEER.
   C. TESTING: THE OPERATOR, TOOL, AND FASTENER SHALL BE PREQUALIFIED BY THE PROJECT INSPECTOR. HE SHALL OBSERVE THE TESTING OF THE FIRST 10 FASTENER INSTALLATIONS. A TEST "PULL-OUT" LOAD OF NOT LESS THAN TWICE THE DESIGN LOAD, OR 200 POUNDS, WHICHEVER IS GREATER, SHALL BE APPLIED TO THE PIN IN SUCH A MANNER AS NOT TO RESIST THE SPALLING TENDENCY OF THE CONCRETE SURROUNDING THE PIN. THEREAFTER, RANDOM TESTS UNDER THE PROJECT INSPECTOR'S SUPERVISION SHALL BE MADE OF APPROXIMATELY 1 IN 10 PINS, EXCEPT THAT WHEN THE DESIGN LOAD EXCEEDS 100 POUNDS, ONE HALF OF THE PINS SHALL BE TESTED. SHOULD FAILURE OCCUR ON ANY PIN TESTED, ALL INSTALLATIONS MUST BE TESTED AND UNFAIR PINS REPLACED.
   D. ALL POWDER DRIVEN CONCRETE FASTENERS SHALL BE ONE OF THE FOLLOWING: HILTI, INC.
   1. 0.145 DIA. PAF X-CR INTO STEEL BASE MATERIAL - ICC NO. ESR 1663
   2. 0.138 DIA. PAF X-CR INTO CONCRETE BASE MATERIAL - ICC NO. ESR 1663

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APP: 01-121121 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRIAN P WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA	

DATE SIGNED: 04/10/2024

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REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS — DATE
- DSA PLAN CHECK
- DSA BACK CHECK
- BIDDING
- CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

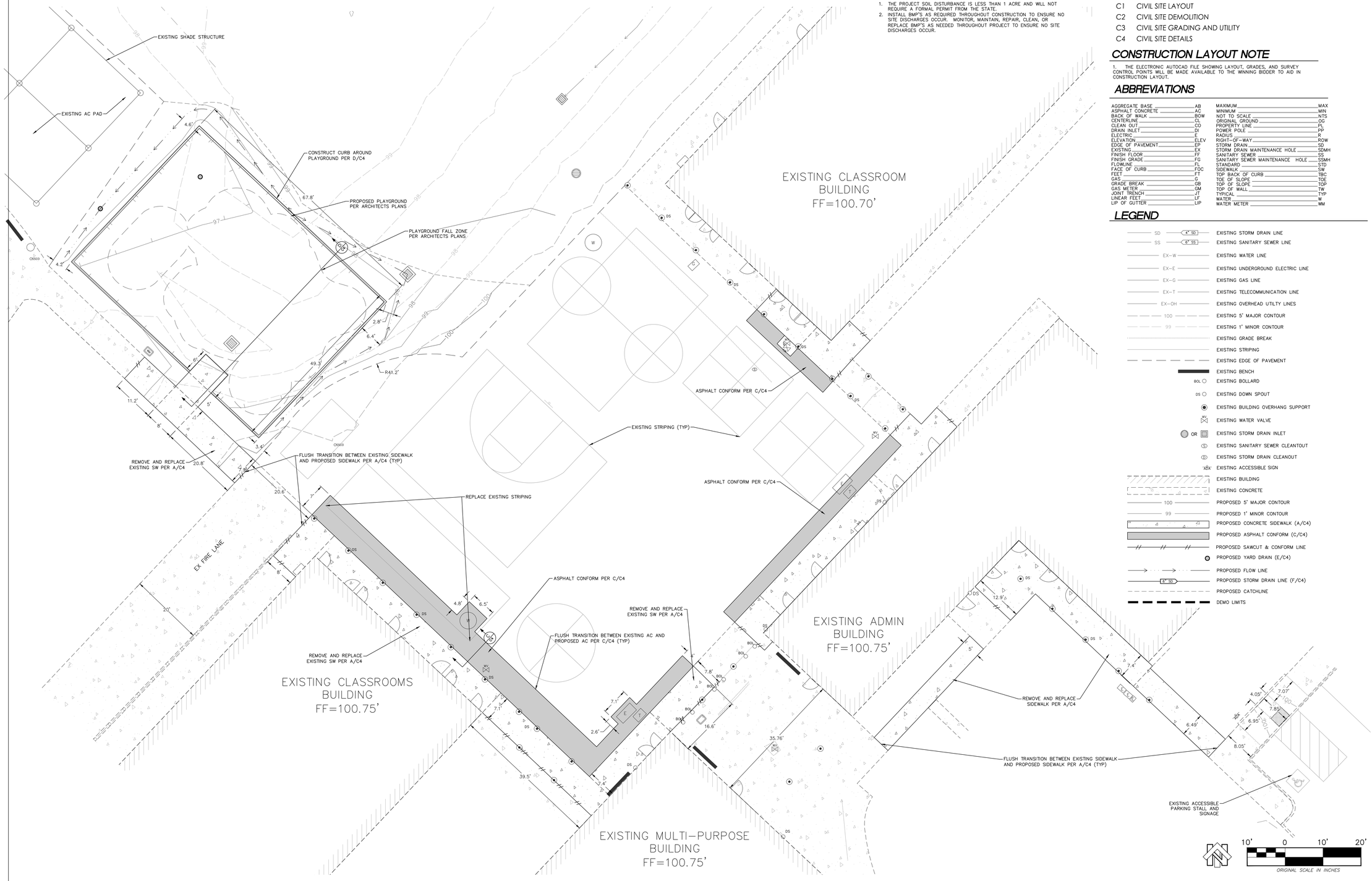
PROJECT STATUS

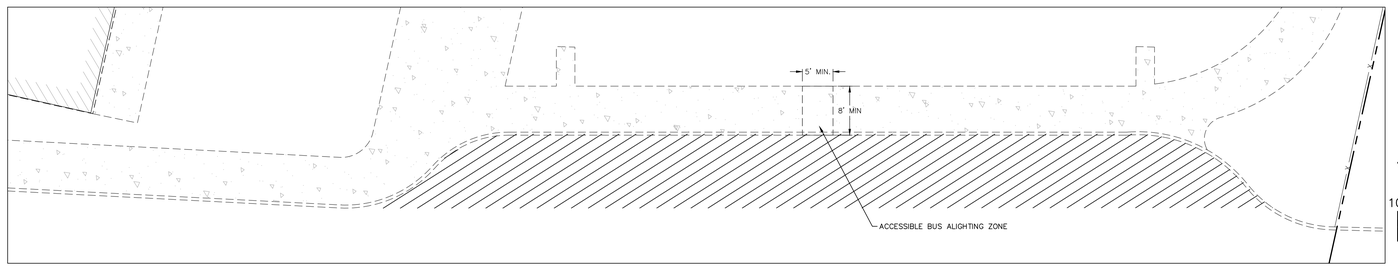
LUCHA ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

GENERAL NOTES

Date 07/27/2023
Project Number 23013
Application Number 01-121121
Drawn KT
Author DH
Drawing Number A0.2

8/2/2019 11:24:05 AM
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10' 0 10' 20'
ORIGINAL SCALE IN INCHES

EROSION AND SEDIMENT CONTROL

1. THE PROJECT SOIL DISTURBANCE IS LESS THAN 1 ACRE AND WILL NOT REQUIRE A FORMAL PERMIT FROM THE STATE.
2. INSTALL BMP'S AS REQUIRED THROUGHOUT CONSTRUCTION TO ENSURE NO SITE DISCHARGES OCCUR. MONITOR, MAINTAIN, REPAIR, CLEAN, OR REPLACE BMP'S AS NEEDED THROUGHOUT PROJECT TO ENSURE NO SITE DISCHARGES OCCUR.

SHEET INDEX

C1	CIVIL SITE LAYOUT
C2	CIVIL SITE DEMOLITION
C3	CIVIL SITE GRADING AND UTILITY
C4	CIVIL SITE DETAILS

CONSTRUCTION LAYOUT NOTE

1. THE ELECTRONIC AUTOCAD FILE SHOWING LAYOUT, GRADES, AND SURVEY CONTROL POINTS WILL BE MADE AVAILABLE TO THE WINNING BIDDER TO AID IN CONSTRUCTION LAYOUT.

ABBREVIATIONS

AGGREGATE BASE	AB	MAXIMUM	MAX
ASPHALT CONCRETE	AC	MINIMUM	MIN
BACK OF WALK	BOW	NOT TO SCALE	NTS
CENTERLINE	CL	ORIGINAL GROUND	OG
CLEAN OUT	CO	PROPERTY LINE	PL
DRAIN INLET	DI	POWER POLE	PP
ELECTRIC	E	RADIUS	R
ELEVATION	ELEV	RIGHT-OF-WAY	ROW
EDGE OF PAVEMENT	EP	STORM DRAIN	SD
EXISTING	EX	STORM DRAIN MAINTENANCE HOLE	SDMH
FINISH FLOOR	FF	SANITARY SEWER	SS
FINISH GRADE	FG	SANITARY SEWER MAINTENANCE HOLE	SSMH
FLOWLINE	FL	STANDARD	STD
FACE OF CURB	FOC	SIDEWALK	SW
FEET	FT	TOP BACK OF CURB	TBC
GAS	G	TOE OF SLOPE	TOE
GRADE BREAK	GB	TOP OF SLOPE	TOP
GAS METER	GM	TOP OF WALL	TW
JOINT TRENCH	JT	TYPICAL	TYP
LINEAR FEET	LF	WATER	W
LIP OF GUTTER	LIP	WATER METER	WM

LEGEND

- SD 4" SD — EXISTING STORM DRAIN LINE
- SS 8" SS — EXISTING SANITARY SEWER LINE
- EX-W — EXISTING WATER LINE
- EX-E — EXISTING UNDERGROUND ELECTRIC LINE
- EX-G — EXISTING GAS LINE
- EX-T — EXISTING TELECOMMUNICATION LINE
- EX-OH — EXISTING OVERHEAD UTILTY LINES
- 100 — EXISTING 5' MAJOR CONTOUR
- 99 — EXISTING 1' MINOR CONTOUR
- EXISTING GRADE BREAK
- EXISTING STRIPING
- EXISTING EDGE OF PAVEMENT
- EXISTING BENCH
- BOL — EXISTING BOLLARD
- DS — EXISTING DOWN SPOUT
- EXISTING BUILDING OVERHANG SUPPORT
- WV — EXISTING WATER VALVE
- OR — EXISTING STORM DRAIN INLET
- S — EXISTING SANITARY SEWER CLEANTOUT
- D — EXISTING STORM DRAIN CLEANOUT
- EXISTING ACCESSIBLE SIGN
- EXISTING BUILDING
- EXISTING CONCRETE
- 100 — PROPOSED 5' MAJOR CONTOUR
- 99 — PROPOSED 1' MINOR CONTOUR
- PROPOSED CONCRETE SIDEWALK (A/C4)
- PROPOSED ASPHALT CONFORM (C/C4)
- PROPOSED SAWCUT & CONFORM LINE
- PROPOSED YARD DRAIN (E/C4)
- PROPOSED FLOW LINE
- 4" SD — PROPOSED STORM DRAIN LINE (F/C4)
- PROPOSED CATCHLINE
- DEMO LIMITS

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRYAN P. WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 8/XX/2024	REGISTERED PROFESSIONAL ENGINEER ROSS M. MORGAN, JR. MAYS No. 68511 CIVIL STATE OF CALIFORNIA

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REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS

DATE 02/26/2024

- ● DSA PLAN CHECK
- ○ DSA BACK CHECK
- ○ BIDDING
- ○ CONSTRUCTION

KEY PLAN

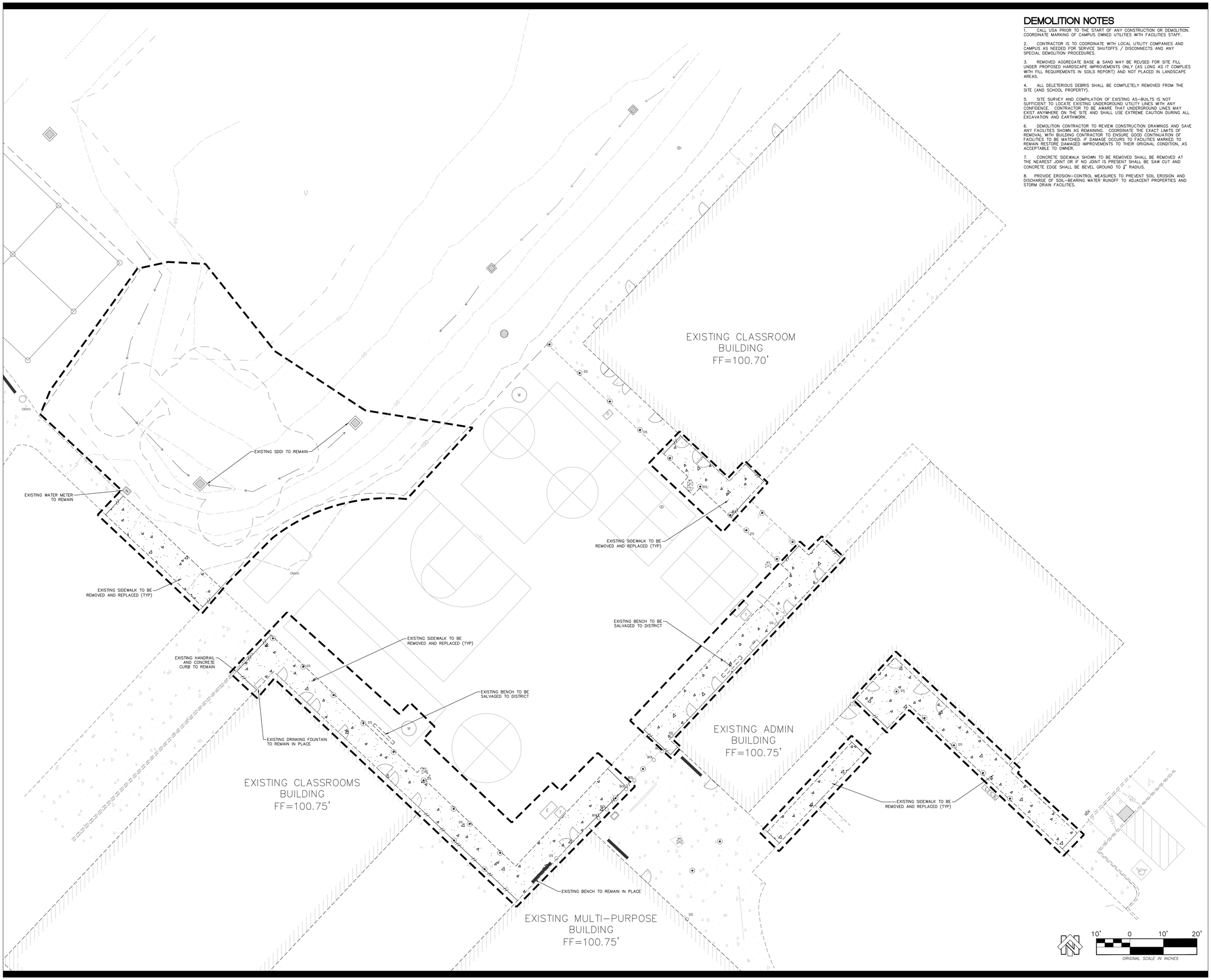
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
PLAY STRUCTURE & CODE REQUIRED ADA UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

CIVIL SITE LAYOUT

Date 02/26/2024	Project Number 23013
Application Number 01-121121	Drawing Number C1
Drawn JMZ	
Author RMS	



DEMOLITION NOTES

1. CALL USA PRIOR TO THE START OF ANY CONSTRUCTION OR DEMOLITION. COORDINATE MARKING OF CAMPUS OWNED UTILITIES WITH FACILITIES STAFF.

2. CONTRACTOR IS TO COORDINATE WITH LOCAL UTILITY COMPANIES AND CAMPUS AS NEEDED FOR SERVICE SHUTOFFS / DISCONNECTS AND ANY SPECIAL DEMOLITION PROCEDURES.

3. REMOVED AGGREGATE BASE & SAND MAY BE REUSED FOR SITE FILL UNDER PROPOSED HARDSCAPE IMPROVEMENTS ONLY (AS LONG AS IT COMPLIES WITH FILL REQUIREMENTS IN SOILS REPORT) AND NOT PLACED IN LANDSCAPE AREAS.

4. ALL DELETERIOUS DEBRIS SHALL BE COMPLETELY REMOVED FROM THE SITE (AND SCHOOL PROPERTY).

5. SITE SURVEY AND COMPILATION OF EXISTING AS-BUILTS IS NOT SUFFICIENT TO LOCATE EXISTING UNDERGROUND UTILITY LINES WITH ANY CONFIDENCE. CONTRACTOR TO BE AWARE THAT UNDERGROUND LINES MAY EXIST ANYWHERE ON THE SITE AND SHALL USE EXTREME CAUTION DURING ALL EXCAVATION AND EARTHWORK.

6. DEMOLITION CONTRACTOR TO REVIEW CONSTRUCTION DRAWINGS AND SAVE ANY FACILITIES SHOWN AS REMAINING. COORDINATE THE EXACT LIMITS OF REMOVAL WITH BUILDING CONTRACTOR TO ENSURE GOOD CONTINUATION OF FACILITIES TO BE MATCHED. IF DAMAGE OCCURS TO FACILITIES MARKED TO REMAIN RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

7. CONCRETE SIDEWALK SHOWN TO BE REMOVED SHALL BE REMOVED AT THE NEAREST JOINT OR IF NO JOINT IS PRESENT SHALL BE SAW CUT AND CONCRETE EDGE SHALL BE BEVEL GROUND TO ½" RADIUS.

8. PROVIDE EROSION-CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF TO ADJACENT PROPERTIES AND STORM DRAIN FACILITIES.

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○ CONSTRUCTION	

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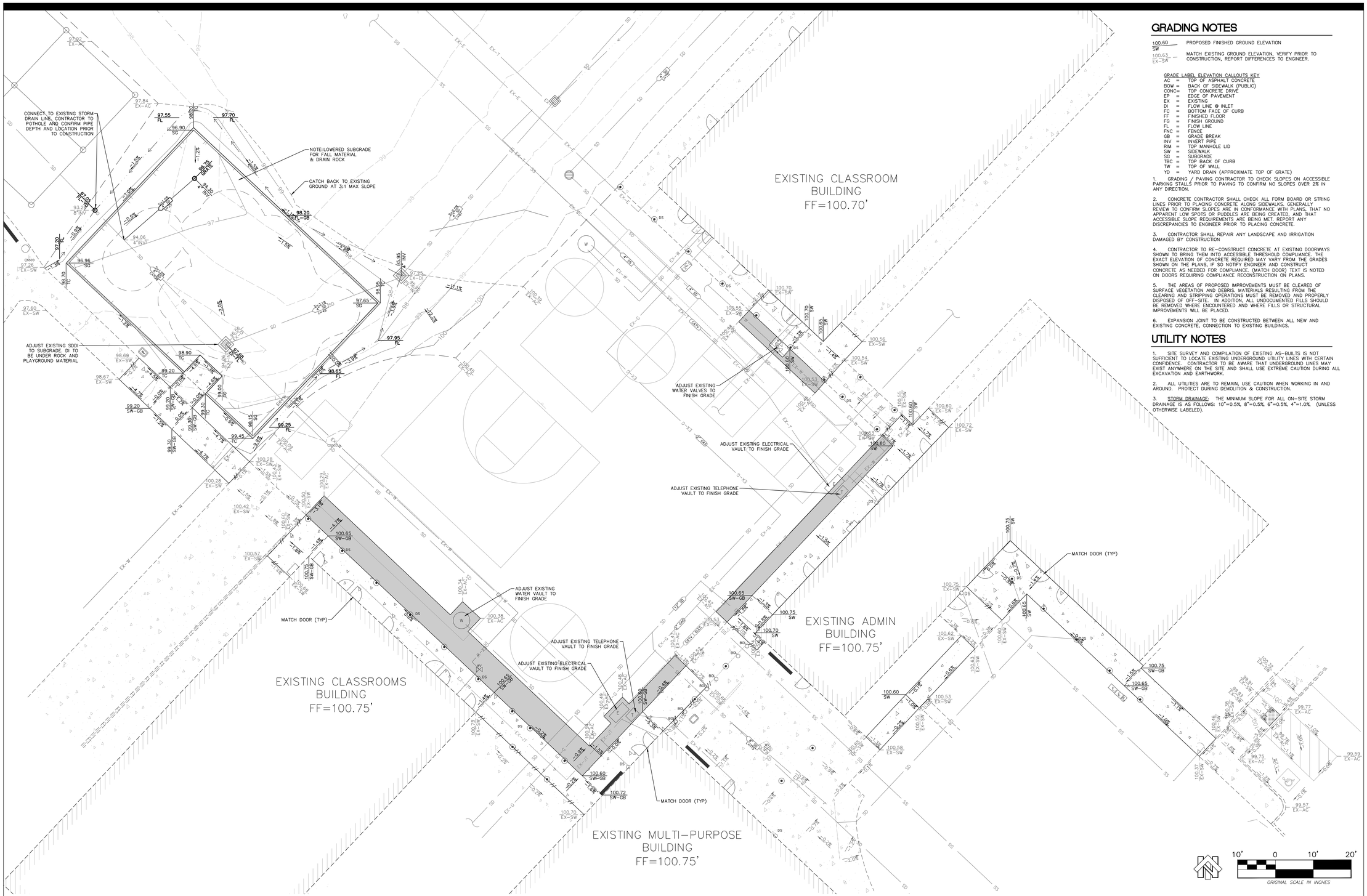
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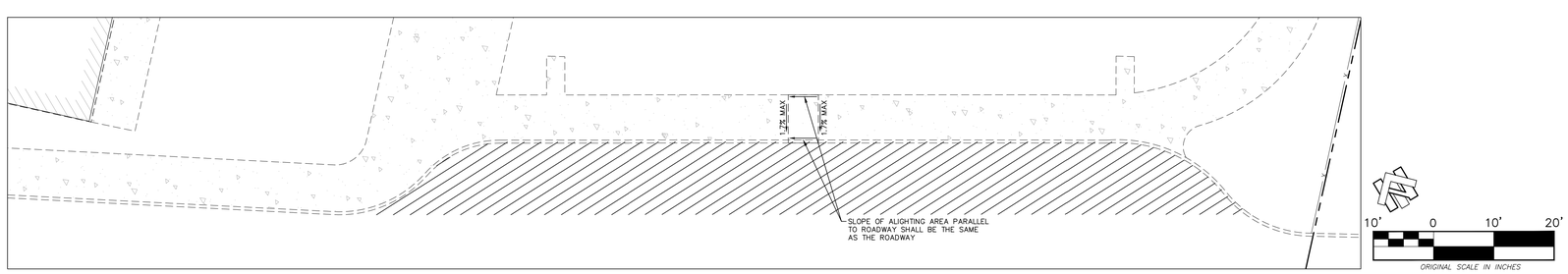
PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
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1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

CIVIL SITE DEMOLITION

Date 02/26/2024	Project Number 23013
Application Number 01-121121	Drawing Number C2
Drawn JMZ	
Author RMS	





GRADING NOTES

100.60 SW — PROPOSED FINISHED GROUND ELEVATION

100.63 EX-SW — MATCH EXISTING GROUND ELEVATION, VERIFY PRIOR TO CONSTRUCTION, REPORT DIFFERENCES TO ENGINEER.

GRADE LABEL ELEVATION CALLOUTS KEY

AC	=	TOP OF ASPHALT CONCRETE
BOW	=	BACK OF SIDEWALK (PUBLIC)
CONC	=	TOP CONCRETE DRIVE
EP	=	EDGE OF PAVEMENT
EX	=	EXISTING
DI	=	FLOW LINE @ INLET
FC	=	BOTTOM FACE OF CURB
FF	=	FINISHED FLOOR
FG	=	FINISH GROUND
FL	=	FLOW LINE
FNC	=	FENCE
GB	=	GRADE BREAK
INV	=	INVERT PIPE
RIM	=	TOP MANHOLE LID
SW	=	SIDEWALK
SG	=	SUBGRADE
TBC	=	TOP BACK OF CURB
TW	=	TOP OF WALL
YD	=	YARD DRAIN (APPROXIMATE TOP OF GRATE)

1. GRADING / PAVING CONTRACTOR TO CHECK SLOPES ON ACCESSIBLE PARKING STALLS PRIOR TO PAVING TO CONFIRM NO SLOPES OVER 2% IN ANY DIRECTION.

2. CONCRETE CONTRACTOR SHALL CHECK ALL FORM BOARD OR STRING LINES PRIOR TO PLACING CONCRETE ALONG SIDEWALKS. GENERALLY REVIEW TO CONFIRM SLOPES ARE IN CONFORMANCE WITH PLANS, THAT NO APPARENT LOW SPOTS OR PUDDLES ARE BEING CREATED, AND THAT ACCESSIBLE SLOPE REQUIREMENTS ARE BEING MET. REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO PLACING CONCRETE.

3. CONTRACTOR SHALL REPAIR ANY LANDSCAPE AND IRRIGATION DAMAGED BY CONSTRUCTION

4. CONTRACTOR TO RE-CONSTRUCT CONCRETE AT EXISTING DOORWAYS SHOWN TO BRING THEM INTO ACCESSIBLE THRESHOLD COMPLIANCE. THE EXACT ELEVATION OF CONCRETE REQUIRED MAY VARY FROM THE GRADES SHOWN ON THE PLANS, IF SO NOTIFY ENGINEER AND CONSTRUCT CONCRETE AS NEEDED FOR COMPLIANCE. (MATCH DOOR) TEXT IS NOTED ON DOORS REQUIRING COMPLIANCE RECONSTRUCTION ON PLANS.

5. THE AREAS OF PROPOSED IMPROVEMENTS MUST BE CLEARED OF SURFACE VEGETATION AND DEBRIS. MATERIALS RESULTING FROM THE CLEARING AND STRIPPING OPERATIONS MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE. IN ADDITION, ALL UNDOCUMENTED FILLS SHOULD BE REMOVED WHERE ENCOUNTERED AND WHERE FILLS OR STRUCTURAL IMPROVEMENTS WILL BE PLACED.

6. EXPANSION JOINT TO BE CONSTRUCTED BETWEEN ALL NEW AND EXISTING CONCRETE, CONNECTION TO EXISTING BUILDINGS.

UTILITY NOTES

1. SITE SURVEY AND COMPILATION OF EXISTING AS-BUILTS IS NOT SUFFICIENT TO LOCATE EXISTING UNDERGROUND UTILITY LINES WITH CERTAIN CONFIDENCE. CONTRACTOR TO BE AWARE THAT UNDERGROUND LINES MAY EXIST ANYWHERE ON THE SITE AND SHALL USE EXTREME CAUTION DURING ALL EXCAVATION AND EARTHWORK.

2. ALL UTILITIES ARE TO REMAIN, USE CAUTION WHEN WORKING IN AND AROUND. PROTECT DURING DEMOLITION & CONSTRUCTION.

3. STORM DRAINAGE: THE MINIMUM SLOPE FOR ALL ON-SITE STORM DRAINAGE IS AS FOLLOWS: 10"=0.5%, 8"=0.5%, 6"=0.5%, 4"=1.0%, (UNLESS OTHERWISE LABELED).

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DATE: 7/8/2024

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRYAN P. WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 9/4/24	REGISTERED PROFESSIONAL ENGINEER ROSS MORGAN SIMMONS No. 68511 CIVIL STATE OF CALIFORNIA

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REVISION HISTORY

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DRAWING STATUS

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○ BIDDING	
○ CONSTRUCTION	

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

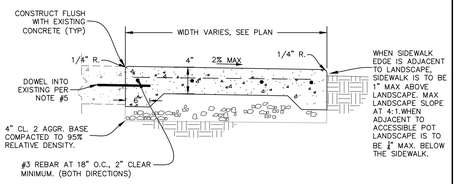
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PLAY STRUCTURE & CODE REQUIRED ADA UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

CIVIL SITE GRADING AND UTILITY

Date 02/26/2024	Project Number 23013
Application Number 01-121121	Drawing Number C3
Drawn JMZ	
Author RMS	

A TYPICAL CONCRETE SIDEWALK

NOT TO SCALE

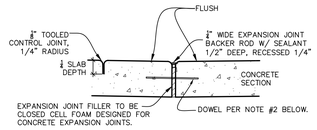


NOTES:

1. THICKEN ALL EDGES OF CONCRETE SIDEWALKS AN EXTRA 2" FOR A MIN OF 6".
2. INSTALL SCORE AND EXPANSION JOINTS PER PLANS
3. LONGITUDINAL SLOPE NOT TO EXCEED 5%, TRANSVERSE SLOPE NOT TO EXCEED 2% IN PLAZA AREAS ALL SLOPES SHALL BE LESS THAN 2%.
4. CONCRETE HAVE MINIMUM DESIGN STRENGTH OF 2,500 PSI WITH HISTORY OF REACHING 4,000 PSI @ 28 DAYS. STRENGTH IS FOR DURABILITY, NO TESTING REQUIRED.
5. WHEN CONSTRUCTED ADJACENT TO EXISTING CONCRETE SIDEWALK DRILL AND DOWEL @ 24" O.C. WITH 12" LONG #4 SMOOTH DOWELS, EQUAL EMBEDMENT.
6. APPLY A MEDIUM BROOM FINISH PERPENDICULAR TO THE DIRECTION OF TRAVEL.

B EXPANSION & CONTROL JOINTS

NOT TO SCALE

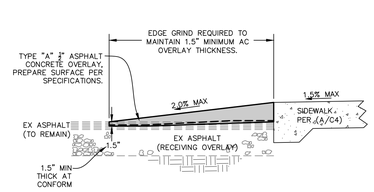


NOTES:

1. EXPANSION JOINT SHALL BE CLEAN AND DRY PRIOR TO INSTALLING BACKER ROD AND JOINT SEALANT.
2. ALL COLD AND EXPANSION JOINTS, INCLUDING CONNECTIONS TO EXISTING SIDEWALKS, SHALL BE DOWLED @ 24" O.C. WITH 12" LONG #4 SMOOTH DOWELS, EQUAL EMBEDMENT.
3. CONTROL JOINTS SHALL BE SPACED EVENLY NOT TO EXCEED WIDTH OF SIDEWALK.
4. INSTALL SCORE AND EXPANSION JOINTS PER ARCH PLANS. IF NONE SHOWN CONTRACTOR TO SUBMIT SHOP DRAWING OF PROPOSED JOINTS FOR APPROVAL.

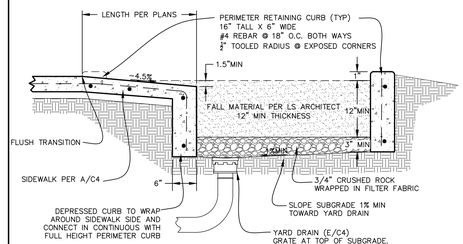
C TYPICAL ASPHALT CONFORM

NOT TO SCALE



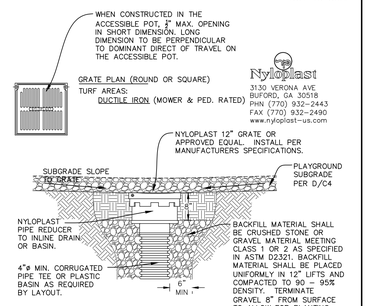
D PLAYGROUND DETAIL

NOT TO SCALE



E TYPICAL YARD DRAIN

NOT TO SCALE



F TYPICAL STORM DRAIN TRENCH

NOT TO SCALE

NOTES:

1. FOR JOINT TRENCHES SEPARATE LINES BY 12" MIN. HORIZONTAL OR VERTICAL. WHEN CROSSING LINES SEPARATE BY 12" MINIMUM.
2. SEWER & STORM WATER ARE NOT TO BE RUN IN JOINT TRENCHES. MAINTAIN 5' MINIMUM SEPARATION TO OTHER UTILITIES (TYPICAL)

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LICENSED ARCHITECT BRYAN P. WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 9/4/2024	REGISTERED PROFESSIONAL ENGINEER ROBERT MORGAN SIMMONS No. 68511 CIVIL STATE OF CALIFORNIA

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KEY PLAN

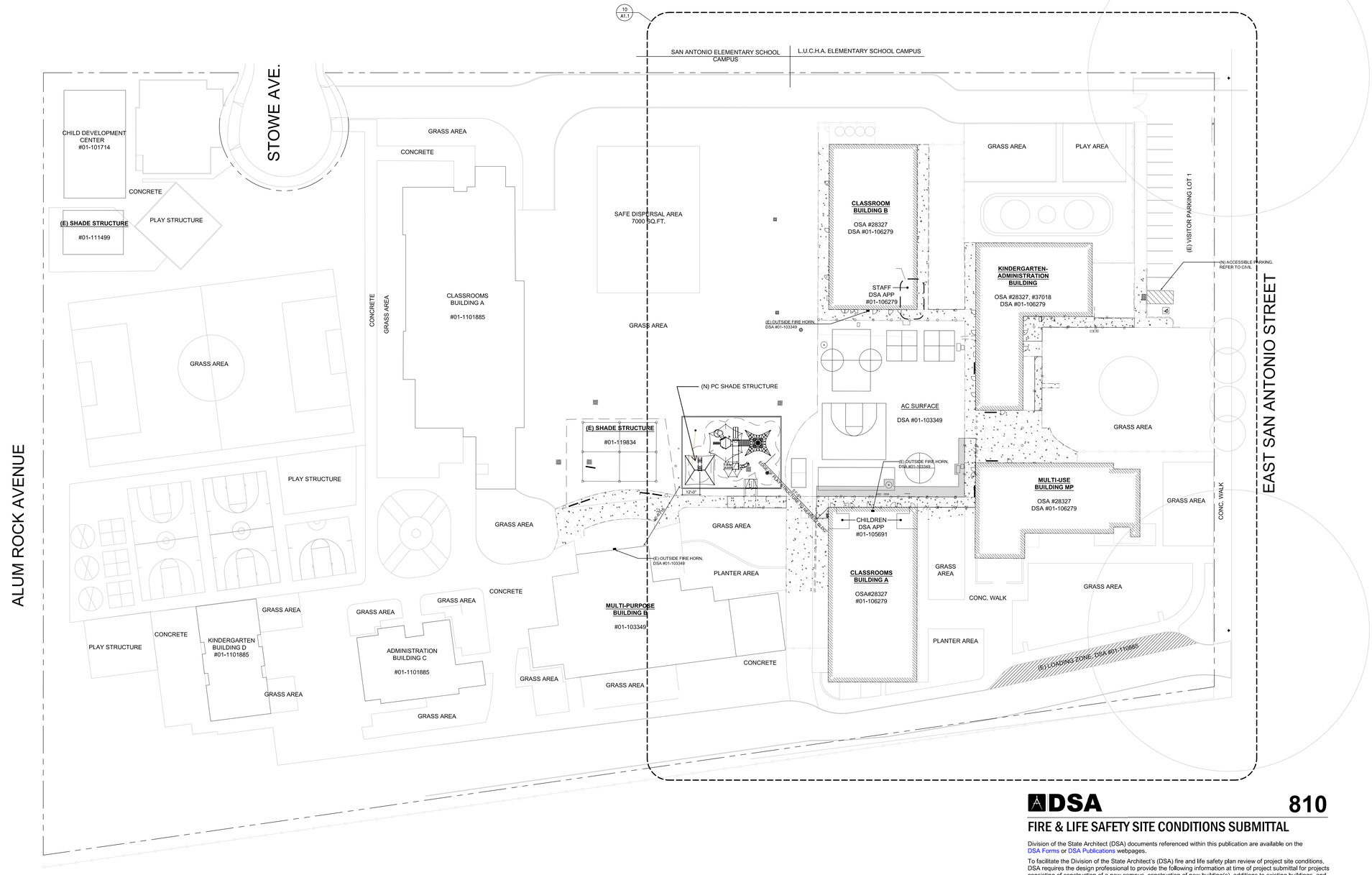
ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
PLAY STRUCTURE & CODE REQUIRED ADA UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

CIVIL SITE DETAILS

Date	02/26/2024
Project Number	23013
Application Number	01-121121
Drawing Number	C4
Drawn	JMZ
Author	RMS



DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION
School District/Owner: Alum Rock Elementary School District
Project Name/School: L.U.C.H.A. Elementary School
Project Address: 1711 E. San Antonio Street, San Jose, CA 95116

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRIAN P WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 04/12/2024	

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KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 GAY AVENUE,
SAN JOSE, CA 95127

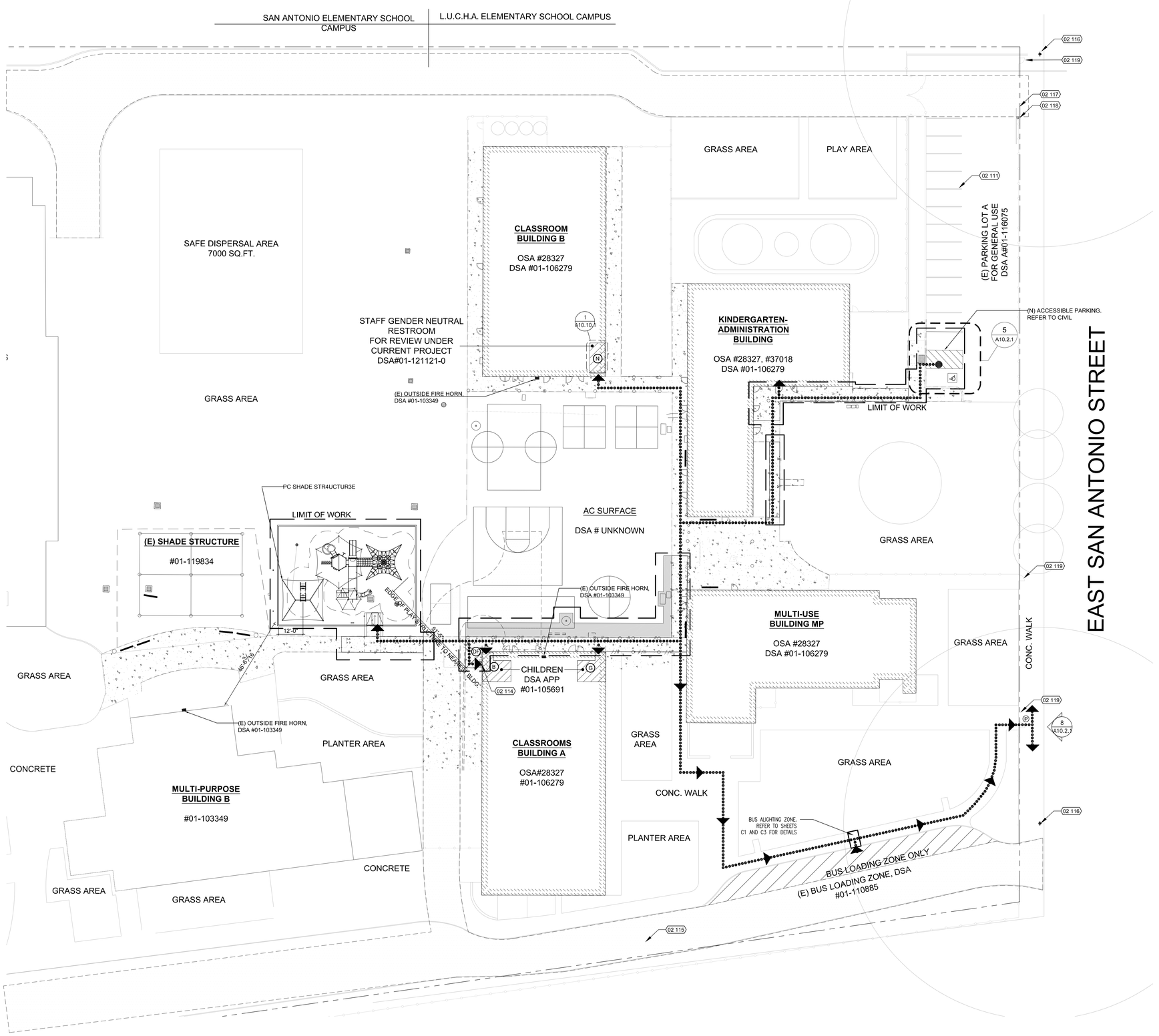
PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

SITE PLAN OVERALL

Date	Project Number
07/27/2023	23013
Application Number	Drawing Number
01-121121	A1.0
Drawn KT	
Author DH	

SITE PLAN OVERALL | 1" =30'-0" | 10



SITE PLAN OVERALL 1" = 20'-0" 10

KEY NOTES

NUMBER	NOTE
02 111	(E) PARKING LOT TO BE RESTRIPED
02 114	(E) ACCESSIBLE DRINKING FOUNTAIN. DSA A#01-105691
02 115	(E) FIRE LANE, DSA A#01-110885
02 116	(E) FIRE HYDRANT
02 117	(E) VEHICULAR SLIDING GATE
02 118	(E) FENCE MOUNTED TOW AWAY SIGN TO BE REMOVE AND REPLACED. REFER TO 7/A10.2.1
02 119	(E) MAN GATE AND FENCE

ACCESSIBLE PARKING

BASED ON 2022 CBC TABLE 11B-208.2 "PARKING SPACES"

STANDARD PARKING PROVIDED: 13 STALLS
ACCESSIBLE PARKING PROVIDED: 1 VAN STALL
TOTAL PARKING PROVIDED: 14 STALLS

BICYCLE STORAGE CALCS

BASED ON 2022 CAL GREEN BUILDING STANDARDS CODE SECTION 5.106.4.2 BICYCLE PARKING [DSA-SS]

N/A - NO NEW BUILDINGS

ACCESSIBLE PATH OF TRAVEL

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLANS IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM AND SLIP RESISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR 6'-0" HIGH TEMPORARY CONSTRUCTION BARRIER WITH VISION SCREEN AT STAGING, STORAGE AND CONSTRUCTIONS AREA WITH SIGNAGE EVERY 20'-0" TO WARN STUDENTS OF CONSTRUCTION AREA.
2. CONTRACTOR TO BRING IN OFFICE TRAILER TO CONSTRUCTION AREA.
3. CONTRACTOR SHALL ACCESS THE SITE FROM EAST SAN ANTONIO STREET. ANY DAMAGE TO FIRE LANE WILL BE AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR TO REPAIR BACK TO EXISTING CONDITIONS ALL LAYDOWN AREAS AT THE END OF CONSTRUCTION. THIS INCLUDES LANDSCAPE AREAS AND ANY BROKEN SPRINKLERS, VALVE BOXES, CONCRETE, ASPHALT, ETC.
5. CONTRACTOR SHALL REPLACE, RECONSTRUCT AND REPAIR ALL EXISTING WORK THAT IS IMPACTED, DAMAGED, OR DESTROYED AS A RESULT F ANY CONTRACTOR WORK INCLUDING, BUT NO LIMITED TO, HARDSCAPING, SIDEWALKS, IRRIGATION SYSTEMS, LANDSCAPING, LAWNS, STRUCTURES, AND UTILITIES - ALL TO THE SATISFACTION OF THE DISTRICT.
6. WHERE ASPHALT OR CONCRETE IS BEING REPATCHED, CONTRACTOR SHALL PROVIDE EVEN AND STRAIGHT LINE CUTS WITH 2-FOOT STRAIGHT SLURRY SEAL SURFACE PATCH ON BOTH SIDES OF CUT.
7. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AN TRENCHING ON SITE TO AVOID EXISTING DUCTS, PIPING OR CONDUITS, ETC., AND TO PREVENT HAZARDS TO PERSONNEL AND/OR DAMAGE TO EXISTING UNDERGROUND UTILITIES OR STRUCTURES WHERE OR NOT SHOWN AND INSTALLED BY ANY OTHER CONTRACTS. THE ARCHITECT IS NOT RESPONSIBLE FOR THE LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES WHETHER OR NOT SHOWN OR DETAILED AND INSTALLED BY ANY OTHER CONTRACTS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED. THESE DRAWINGS AND SPECIFICATIONS DO NOT INCLUDE THE NECESSARY ELEMENTS FOR CONSTRUCTION SAFETY.
8. GATES IN PATH OF TRAVEL SHALL COMPLY WITH EXIT DOOR REQUIREMENTS WITH PROPER LEVER HARDWARE AND KICK PLATES.

LEGEND

- (E)BUILDING, NOT UNDER SCOPE OF WORK
- 20'-0" WIDE MINIMUM CLEAR FIRE ACCESS LANE, DSA #01-110885
- ACCESSIBLE BATHROOM FACILITIES:
  - (W) WOMENS (ADULT)
  - (M) MENS (ADULT)
  - (G) GIRLS (5 - 8)
  - (B) BOYS (5 - 8)
  - (N) ALL GENDER (ADULT)
  - (DF) DRINKING FOUNTAIN
- CONCRETE WALK, SEE CIVIL DWGS
- PATH OF EGRESS/ACCESSIBLE PATH OF TRAVEL, SEE DEFINITION ON THIS SHEET
- (E)PROPERTY LINE
- LIMIT OF WORK
- (E) FENCE & GATES
- FIRE HYDRANT
- LOCATION OF ACCESSIBLE EXTERIOR EXIT DOORS, ENTRANCES, AND EGRESS

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KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

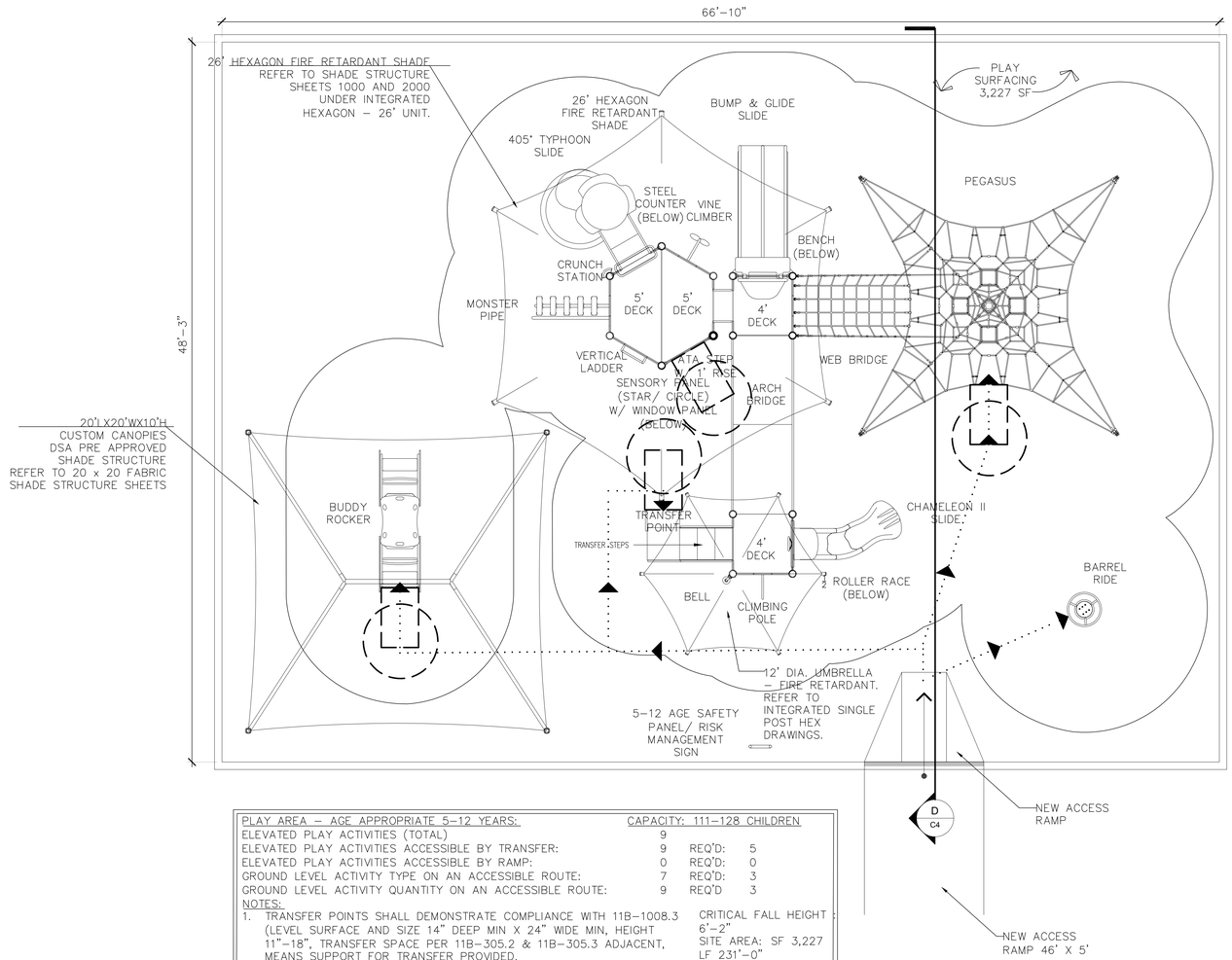
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

L.U.C.H.A.ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

ENLARGED SITE PLAN

Date 07/27/2023	Project Number 23013
Application Number 01-121121	Drawing Number A1.1
Drawn KT	
Author DH	



PLAY AREA – AGE APPROPRIATE 5–12 YEARS:	CAPACITY: 111–128 CHILDREN	
ELEVATED PLAY ACTIVITIES (TOTAL)	9	
ELEVATED PLAY ACTIVITIES ACCESSIBLE BY TRANSFER:	9	REQ'D: 5
ELEVATED PLAY ACTIVITIES ACCESSIBLE BY RAMP:	0	REQ'D: 0
GROUND LEVEL ACTIVITY TYPE ON AN ACCESSIBLE ROUTE:	7	REQ'D: 3
GROUND LEVEL ACTIVITY QUANTITY ON AN ACCESSIBLE ROUTE:	9	REQ'D 3

NOTES:
1. TRANSFER POINTS SHALL DEMONSTRATE COMPLIANCE WITH 11B–1008.3 (LEVEL SURFACE AND SIZE 14" DEEP MIN X 24" WIDE MIN, HEIGHT 11"–18", TRANSFER SPACE PER 11B–305.2 & 11B–305.3 ADJACENT, MEANS SUPPORT FOR TRANSFER PROVIDED.
2. TRANSFER STEPS TO BE STRIPED PER 11B–504.4.1. LEVEL SURFACES 14" DEEP MIN X 24" WIDE MIN, 8" HIGH MAX, MEANS OF SUPPORT, STRIPING. PER 11B–1008.3.2
3. USE ZONES FINISH SURFACE OF PLAYGROUND COMPLIES WITH ASTM F1292–99.
4. GROUND SURFACING COMPLIES WITH ASTM 1951–99
5. PLAYGROUND EQUIPMENT SHALL COMPLY WITH ASTM F1487–98.
6. THIS PLAY AREA MEETS CBC SECTION 11B–1008.
7. ALL STRUCTURES TO COMPLY WITH 80" VERTICAL CLEARANCE WHERE REQUIRED PER 11B–1008.2
8. ALL ENTRY POINTS AND SEATS TO COMPLY WITH 11B–1008.4.4

CRITICAL FALL HEIGHT : 6'–2"
SITE AREA: SF 3,227
LF 231'–0"
DRAWN BY: CG

PLAY AREAS 11B-240.
PG1) WHERE SEPARATE PLAY AREAS ARE PROVIDED FOR SPECIFIC AGE GROUPS, EACH PLAY AREA SHALL COMPLY WITH CBC SECTION 11B-240.
PG2) IDENTIFY ALL GROUND LEVEL AND ELEVATED PLAY COMPONENTS. PROVIDE AND IDENTIFY ACCESSIBLE GROUND LEVEL AND ELEVATED PLAY COMPONENTS PER CBC SECTION 11B-240.2 AND TABLE 11B-240.2.1.2.
PG3) PROVIDE ACCESSIBLE ROUTES TO ALL ACCESSIBLE PLAY COMPONENTS PER CBC SECTION 11B-1008.2,AND CBC SECTION 11B-1008.2.4. TRANSFER SYSTEMS MAY BE USED PER CBC SECTION 11B-1008.2.1 EXCEPTIONS.
PG4) RAMPS CONNECTING PLAY COMPONENTS SHALL COMPLY WITH CBC SECTION 11B-1008.2.5
PG5) TRANSFER PLATFORMS FOR TRANSFER FROM WHEELCHAIRS OR OTHER MOBILITY AIDS SHALL COMPLY WITH CBC SECTION 11B-1008.3.1.
PG6) TRANSFER STEPS FOR MOVEMENT FROM TRANSFER PLATFORMS TO LEVELS WITH ELEVATED PLAY COMPONENTS SHALL COMPLY WITH CBC SECTION 11B-1008.3.2.
PG7) SHOW A CLEAR FLOOR OR GROUND SPACE PER CBC SECTION 1008.4.2 AND A TURNING SPACE PER CBC SECTIONS 11B-1008.4.1 FOR ALL GROUND LEVEL PLAY COMPONENTS ON AN ACCESSIBLE ROUTE AND FOR ALL ELEVATED PLAY COMPONENTS CONNECTED BY RAMPS.
PG8) GROUND SURFACES ON ACCESSIBLE ROUTES, CLEAR FLOOR OR GROUND SPACES, AND TURNING SPACES SHALL COMPLY WITH CBC SECTION 11B-1008.2.6: FOR ACCESSIBILITY; GROUND SURFACES SHALL COMPLY WITH ASTM F 1951 AND SHALL BE INSPECTED AND MAINTAINED REGULARLY AND FREQUENTLY TO ENSURE CONTINUED COMPLIANCE. IDENTIFY GROUND SURFACES LOCATED WITHIN USE ZONES. GROUND SURFACES WITHIN USE ZONES SHALL COMPLY WITH ASTM F 1292.

CBC CHAPTER 2 DEFINITIONS:
"ELEVATED PLAY COMPONENT" A PLAY COMPONENT THAT IS APPROACHED ABOVE OR BELOW GRADE AND THAT IS PART OF A COMPOSITE PLAY STRUCTURE CONSISTING OF TWO OR MORE PLAY COMPONENTS ATTACHED OR FUNCTIONALLY LINKED TO CREATE AN INTEGRATED UNIT PROVIDING MORE THAN ONE PLAY ACTIVITY.
"GROUND LEVEL PLAY COMPONENT" A PLAY COMPONENT THAT IS APPROACHED AND EXITED AT THE GROUND LEVEL.

DSA REVIEW IS NOT REQUIRED FOR ALL PLAY STRUCTURES.

N

ENLARGED SITE PLAN 1/4" = 1'-0" 15

LEGEND

1. WEBSCAPE PEGASUS ACTIVITY NET – MODEL #4424
2. WEB BRIDGE – MODEL NUMBER 714–614–4
3. PLAYSTRUCTURE: SQUARE DECK – MODEL #714–502–9
   HEPTAGON DECK – MODEL #714–517–9
   SHADE STRUCTURES (NO LARGER THAN 250 SF) – #714–862–4
   #714–862–7
4. BUDDY ROCKER – MODEL #6–8–6
5. RISK MANAGEMENT SIGN – MODEL #787
6. HAGS SOLO – PIROUETTE – MODEL #593U201
7. HOW TALL RU PANEL – MODEL #714–633
8. CHAMELEON II SLIDE SYSTEM – MODEL #714–670
9. CHAMELEON II SPIRAL SLIDE – MODEL #714–670–8L
10. WIGGLY WORM CLIMBER – MODEL #714–974–8
11. STAIR (ADA) 2'–0" RISE BETWEEN DECKS – MODEL #714–959–49
12. VERTIGO CARGO CLIMBER – MODEL #714–844–4

NOTE:

MODEL NUMBERS LISTED ARE BY MIRACLE PLAYSYSTEMS. EQUIVALENT PRODUCTS MAY BE SUBMITTED FOR REVIEW PER SPECIFICATION SECTION 02880
ALL PLAY STRUCTURE COMPONENTS OFCI.

LEGEND

30 X 48 CLEAR SPACE

5'-0" DIAMETER CLEAR WHEEL CHAIR TURNING RADIUS

ACCESSIBLE PATH OF TRAVEL, SEE DEFINITION ON THIS SHEET

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS
DATE
○ DSA PLAN CHECK
○ DSA BACK CHECK
○ BIDDING
○ CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

L.U.C.H.A.ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

ENLARGED PLAY STRUCTURE PLAN

Date 07/27/2023	Project Number 23013
Application Number 01-121121	Drawing Number A1.2
Drawn KT	
Author DH	

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND OTHER DIVISION 1 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 SUMMARY

A. THIS SECTION INCLUDES THE FOLLOWING:
1. DEMOLITION AND REMOVAL OF SELECTED PORTIONS OF BUILDING OR STRUCTURE.
2. DEFINITIONS

B. REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.

C. REMOVE AND SALVAGE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND DELIVER THEM TO OWNER.

D. REMOVE AND REINSTALL: DETACH ITEMS FROM EXISTING CONSTRUCTION, PREPARE THEM FOR REUSE, AND REINSTALL THEM WHERE INDICATED.

E. EXISTING TO REMAIN: EXISTING ITEMS OF CONSTRUCTION THAT ARE NOT TO BE REMOVED AND THAT ARE NOT OTHERWISE INDICATED TO BE REMOVED, REMOVED AND SALVAGED, OR REMOVED AND REINSTALLED.

1.3 SUBMITTALS

A. QUALIFICATION DATA: FOR DEMOLITION FIRM.

B. SCHEDULE OF SELECTIVE DEMOLITION ACTIVITIES: INDICATE THE FOLLOWING:
1. DETAILED SEQUENCE OF SELECTIVE DEMOLITION AND REMOVAL WORK, WITH STARTING AND ENDING DATES FOR EACH ACTIVITY. ENSURE OWNER'S BUILDING MANAGER'S ON-SITE OPERATIONS ARE UNINTERRUPTED.
2. INTERRUPTION OF UTILITY SERVICES. INDICATE HOW LONG UTILITY SERVICES WILL BE INTERRUPTED.
3. COORDINATION FOR SHUTOFF, CAPPING, AND CONTINUATION OF UTILITY SERVICES.
4. USE OF ELEVATOR AND STAIRS.
5. LOCATIONS OF PROPOSED DUST- AND NOISE-CONTROL TEMPORARY PARTITIONS AND MEANS OF EGRESS.
6. COORDINATION OF OWNER'S CONTINUING OCCUPANCY OF PORTIONS OF EXISTING BUILDING AND OF OWNER'S PARTIAL OCCUPANCY OF COMPLETED WORK.
7. MEANS OF PROTECTION FOR ITEMS TO REMAIN AND ITEMS IN PATH OF WASTE REMOVAL FROM BUILDING.

C. INVENTORY: AFTER SELECTIVE DEMOLITION IS COMPLETE, SUBMIT A LIST OF ITEMS THAT HAVE BEEN REMOVED AND SALVAGED.

1.4 QUALITY ASSURANCE

LIST OF APPLICABLE CODES
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

B. DEMOLITION FIRM QUALIFICATIONS: AN EXPERIENCED FIRM THAT HAS SPECIALIZED IN DEMOLITION WORK SIMILAR IN MATERIAL AND EXTENT TO THAT INDICATED FOR THIS PROJECT.

C. REFRIGERANT RECOVERY TECHNICIAN QUALIFICATIONS: CERTIFIED BY AN EPA-APPROVED CERTIFICATION PROGRAM.

D. REGULATORY REQUIREMENTS: COMPLY WITH GOVERNING EPA NOTIFICATION REGULATIONS BEFORE BEGINNING SELECTIVE DEMOLITION. COMPLY WITH HAULING AND DISPOSAL REGULATIONS OF AUTHORITIES HAVING JURISDICTION.

E. STANDARDS: COMPLY WITH ANSI A10.6 AND NFPA 241.

F. PRE-DEMOLITION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

1.5 PROJECT CONDITIONS

A. STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS ON-SITE IS NOT PERMITTED.

B. UTILITY SERVICE: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
1. MAINTAIN FIRE-PROTECTION FACILITIES IN SERVICE DURING SELECTIVE DEMOLITION OPERATIONS.
2. WARRANTY

C. EXISTING WARRANTIES: REMOVE, REPLACE, PATCH, AND REPAIR MATERIALS AND SURFACES CUT OR DAMAGED DURING SELECTIVE DEMOLITION, BY METHODS AND WITH MATERIALS SO AS NOT TO VOID EXISTING WARRANTIES.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EXAMINATION

A. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.

B. SURVEY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.

C. INVENTORY AND RECORD THE CONDITION OF ITEMS TO BE REMOVED AND REINSTALLED AND ITEMS TO BE REMOVED AND SALVAGED.

D. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, INVESTIGATE AND MEASURE THE NATURE AND EXTENT OF CONFLICT. PROMPTLY SUBMIT A WRITTEN REPORT TO ARCHITECT.

E. PERFORM SURVEYS AS THE WORK PROGRESSES TO DETECT HAZARDS RESULTING FROM SELECTIVE DEMOLITION ACTIVITIES.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. EXISTING SERVICES/SYSTEMS: MAINTAIN SERVICES/SYSTEMS INDICATED TO REMAIN AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS.
1. COMPLY WITH REQUIREMENTS FOR EXISTING SERVICES/SYSTEMS INTERRUPTIONS SPECIFIED IN DIVISION 1 SECTION "SUMMARY."

B. SERVICE/SYSTEM REQUIREMENTS: LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF INDICATED UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS SERVING AREAS TO BE SELECTIVELY DEMOLISHED.
1. ARRANGE TO SHUT OFF INDICATED UTILITIES WITH UTILITY COMPANIES.
2. IF SERVICES/SYSTEMS ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, BEFORE PROCEEDING WITH SELECTIVE DEMOLITION PROVIDE TEMPORARY SERVICES/SYSTEMS THAT BYPASS AREA OF SELECTIVE DEMOLITION AND THAT MAINTAIN CONTINUITY OF SERVICES/SYSTEMS TO OTHER PARTS OF BUILDING.
3. CUT OFF PIPE OR CONDUIT IN WALLS OR PARTITIONS TO BE REMOVED. CAP, VALVE, OR PLUG AND SEAL REMAINING PORTION OF PIPE OR CONDUIT AFTER BYPASSING.
a. WHERE ENTIRE WALL IS TO BE REMOVED, EXISTING SERVICES/SYSTEMS MAY BE REMOVED WITH REMOVAL OF THE WALL.

3.3 PREPARATION

A. SITE ACCESS AND TEMPORARY CONTROLS: CONDUCT SELECTIVE DEMOLITION AND DEBRIS-REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.

3.4 SELECTIVE DEMOLITION, GENERAL

A. GENERAL: DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO THE EXTENT REQUIRED BY NEW CONSTRUCTION AND AS INDICATED. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS AND AS FOLLOWS:
1. PROCEED WITH SELECTIVE DEMOLITION SYSTEMATICALLY, FROM HIGHER TO LOWER LEVEL. COMPLETE SELECTIVE DEMOLITION OPERATIONS ABOVE EACH FLOOR OR TIER BEFORE DISTURBING SUPPORTING MEMBERS ON THE NEXT LOWER LEVEL.
2. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE, AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. USE HAND TOOLS OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERING AND CHOPPING, TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES. TEMPORARILY COVER OPENINGS TO REMAIN.
3. CUT OR DRILL FROM THE EXPOSED OR FINISHED SIDE INTO CONCEALED SURFACES TO AVOID MARRING EXISTING FINISHED SURFACES.
4. DO NOT USE CUTTING TORCHES UNTIL WORK AREA IS CLEARED OF FLAMMABLE MATERIALS. AT CONCEALED SPACES, SUCH AS DUCT AND PIPE INTERIORS, VERIFY CONDITION AND CONTENTS OF HIDDEN SPACE BEFORE STARTING FLAME-CUTTING OPERATIONS. MAINTAIN FIRE WATCH AND PORTABLE FIRE-SUPPRESSION DEVICES DURING FLAME-CUTTING OPERATIONS.
5. MAINTAIN ADEQUATE VENTILATION WHEN USING CUTTING TORCHES.
6. REMOVE DECAYED, VERMIN-INFESTED, OR OTHERWISE DANGEROUS OR UNSUITABLE MATERIALS AND PROMPTLY DISPOSE OF OFF-SITE.
7. REMOVE STRUCTURAL FRAMING MEMBERS AND LOWER TO GROUND BY METHOD SUITABLE TO AVOID FREE FALL AND TO PREVENT GROUND IMPACT OR DUST GENERATION.
8. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS SO AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.

B. REMOVED AND REINSTALLED ITEMS:
1. CLEAN AND REPAIR ITEMS TO FUNCTIONAL CONDITION ADEQUATE FOR INTENDED REUSE. PAINT EQUIPMENT TO MATCH NEW EQUIPMENT.
2. PACK OR CRATE ITEMS AFTER CLEANING AND REPAIRING. IDENTIFY CONTENTS OF CONTAINERS.
3. PROTECT ITEMS FROM DAMAGE DURING TRANSPORT AND STORAGE.
4. REINSTALL ITEMS IN LOCATIONS INDICATED. COMPLY WITH INSTALLATION REQUIREMENTS FOR NEW MATERIALS AND EQUIPMENT. PROVIDE CONNECTIONS, SUPPORTS, AND MISCELLANEOUS MATERIALS NECESSARY TO MAKE ITEM FUNCTIONAL FOR USE INDICATED.

C. EXISTING ITEMS TO REMAIN: PROTECT CONSTRUCTION INDICATED TO REMAIN AGAINST DAMAGE AND SOILING DURING SELECTIVE DEMOLITION. WHEN PERMITTED BY ARCHITECT, ITEMS MAY BE REMOVED TO A SUITABLE, PROTECTED STORAGE LOCATION DURING SELECTIVE DEMOLITION AND REINSTALLED IN THEIR ORIGINAL LOCATIONS AFTER SELECTIVE DEMOLITION OPERATIONS ARE COMPLETE.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

A. CONCRETE: DEMOLISH IN SMALL SECTIONS. CUT CONCRETE TO A DEPTH OF AT LEAST 3/4 INCH AT JUNCTURES WITH CONSTRUCTION TO REMAIN, USING POWER-DRIVEN SAW. DISLODGE CONCRETE FROM REINFORCEMENT AT PERIMETER OF AREAS BEING DEMOLISHED, CUT REINFORCEMENT, AND THEN REMOVE REMAINDER OF CONCRETE INDICATED FOR SELECTIVE DEMOLITION. NEATLY TRIM OPENINGS TO DIMENSIONS INDICATED. PATCH AND REPAIR WITH SIMILAR MATERIALS.

B. MASONRY: DEMOLISH IN SMALL SECTIONS. CUT MASONRY AT JUNCTURES WITH CONSTRUCTION TO REMAIN, USING POWER-DRIVEN SAW, THEN REMOVE MASONRY BETWEEN SAW CUTS. PATCH AND REPAIR WITH SIMILAR MATERIALS.

C. CONCRETE SLABS-ON-GRADE: SAW-CUT PERIMETER OF AREA TO BE DEMOLISHED, THEN BREAK UP AND REMOVE.
1. PATCH AND REPAIR WITH SIMILAR MATERIALS.
2. DISPOSAL OF DEMOLISHED MATERIALS

D. GENERAL: EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE RECYCLED, REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN OWNER'S PROPERTY, REMOVE DEMOLISHED MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL.
1. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
2. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
3. REMOVE DEBRIS FROM ELEVATED PORTIONS OF BUILDING BY CHUTE, HOIST, OR OTHER DEVICE THAT WILL CONVEY DEBRIS TO GRADE LEVEL IN A CONTROLLED DESCENT.
4. COMPLY WITH REQUIREMENTS SPECIFIED IN DIVISION 1 SECTION "CONSTRUCTION WASTE MANAGEMENT."

E. BURNING: DO NOT BURN DEMOLISHED MATERIALS.

F. DISPOSAL: TRANSPORT DEMOLISHED MATERIALS OFF OWNER'S PROPERTY AND LEGALLY DISPOSE OF THEM.

3.6 CLEANING

A. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE SELECTIVE DEMOLITION OPERATIONS BEGAN.

END OF SECTION 024119

SECTION 02880

PLAY FIELD EQUIPMENT & STRUCTURES

PART 1. GENERAL

4.A. SCOPE
1. 1.A.1. FURNISH LABOR, MATERIAL AND EQUIPMENT NECESSARY FOR THE PROVISION AND INSTALLATION OF THE PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
2. 1.A.2. WORK SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING: EXCAVATION, LAYOUT, AND THE PROVISION AND INSTALLATION OF PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, INCLUDING ALL APPURTENANCES AND ACCESSORIES AS REQUIRED FOR A FULL AND COMPLETE INSTALLATION.

1.A. SUBMITTALS
1. 1.B.1. PRODUCT DATA: THE CONTRACTOR SHALL SUBMIT WITHIN 10 CALENDAR DAYS AFTER RECEIPT OF NOTICE TO PROCEED 1 COMPLETE SETS OF THE MATERIAL AND EQUIPMENT SUBMITTALS, INCLUDING:
a. PLAY EQUIPMENT MANUFACTURER AND MANUFACTURER'S REPRESENTATIVE'S NAME(S) AND ADDRESS(ES);

A. PLAN VIEW DRAWINGS WITH MODEL NUMBERS, DESCRIPTIVE LABELS (INCLUDING COMPONENT NAMES,) DECK HEIGHTS, AND NOTATIONS OF COMPLIANCE WITH CPSC, ASTM F1487-01 AND ADA;

B. DETAILED COMPONENT LIST WITH MODEL NUMBERS AND CATALOG DESCRIPTIONS;

C. COLOR CHART;

D. WRITTEN MATERIAL SPECIFICATIONS FOR ALL COMPONENTS;

E. IPEMA CERTIFICATION CERTIFICATE FROM THE IPEMA WEBSITE;

F. COPY OF MANUFACTURER'S WARRANTY IN CERTIFICATE FORMAT;

G. COPY OF MANUFACTURER'S ISO 9001 CERTIFICATION.

2. 1.B.2. APPROVAL OF THE SUBMITTALS SHALL BE THE CONTRACTOR'S AUTHORIZATION TO ORDER THE REQUIRED MATERIAL AND EQUIPMENT. THERE WILL BE NO DEVIATION FROM THE APPROVED SUBMITTALS WITHOUT THE WRITTEN AUTHORIZATION OF THE OWNER'S REPRESENTATIVE.

1.A. PRODUCTS

1. 1.C.1. PRODUCTS: THE LAYOUT SHOWN IN THE PLAN VIEW IS BASED UPON EQUIPMENT AND MEASUREMENTS FROM MIRACLE RECREATION EQUIPMENT COMPANY. ACCEPTABLE MANUFACTURERS INCLUDE MIRACLE RECREATION OR EQUAL. OTHER PRODUCTS MAY BE CONSIDERED EQUAL IF ALL OF THE PARAMETERS, SPECIFICATIONS AND DESIGN INTENT OF THE DRAWINGS ARE MET. CAN BE CONTACTED AT (PHONE), (FAX), OR (EMAIL.)

2. 1.C.2. DESIGN AND FABRICATION: PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT SUBMITTED FOR CONSIDERATION SHALL BE EQUIVALENT IN DESIGN, LAYOUT, DECK SIZE, POST SIZE, CLAMPING/FASTENING SYSTEM, DECK/SLIDE/CLIMBER HEIGHT, ADA ACCESSIBILITY, APPEARANCE, COLOR AND CONSTRUCTION DETAIL TO PLAYGROUND EQUIPMENT SPECIFIED IN THE DRAWINGS. REASONABLE VARIATIONS IN SIZE/HEIGHT (NO MORE THAN +/- 10%) AND MANUFACTURER'S STANDARD COLORS MAY BE ALLOWED AT THE OWNER'S DISCRETION. COLOR SCHEMES ARE TO MATCH AS CLOSELY AS POSSIBLE TO THE ORIGINALLY SPECIFIED COLORS. PLAY VALUE AND SAFETY FEATURES OF COMPONENTS MUST BE EQUAL OR SUPERIOR TO SPECIFIED DESIGN AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE.

3. 1.C.3. MODIFICATION: ANY EXPENSE OF MODIFICATION, ADJUSTMENT OR REVISION REQUIRED TO ENSURE COMPLIANCE OF FURNISHED EQUIPMENT TO SPECIFIED EQUIPMENT AND PLAYGROUND DESIGN SHALL BE THE SOLE EXPENSE AND RESPONSIBILITY OF THE CONTRACTOR.

1.A. PLAYGROUND SAFETY STANDARDS AND QUALITY ASSURANCE

1. 1.D.1. **ADLSTANDARDS** ALL PRODUCTS SHALL BEAR THE CERTIFICATION SEAL OF THE INTERNATIONAL PLAY EQUIPMENT MANUFACTURERS ASSOCIATION (IPEMA). ALL DESIGNS SHALL MEET OR EXCEED THE AMERICANS WITH DISABILITIES ACT (ADA) "FINAL ACCESSIBILITY GUIDELINES FOR PLAY AREAS" REGULATIONS AS PUBLISHED ON OCTOBER 18, 2000. ALL MANUFACTURERS MUST BE ISO 9001 CERTIFIED.

1.A. REFERENCES AND STANDARDS

1. 1.E.1. ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS

2. 1.E.2. CPSC: CONSUMER PRODUCT SAFETY COMMISSION

3. 1.E.3. IPEMA: INTERNATIONAL PLAYGROUND EQUIPMENT MANUFACTURERS ASSOCIATION

4. 1.E.4. ADA: AMERICANS WITH DISABILITIES ACT

5. 1.E.5. ISO: INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

6. 1.E.6. CPSI: CERTIFIED PLAYGROUND SAFETY INSPECTOR

1.A. WARRANTY/GUARANTEE

1. 1.F.1. THE EQUIPMENT MANUFACTURER SHALL WARRANT MATERIAL AND WORKMANSHIP AGAINST DEFECTS, FROM THE DATE OF MANUFACTURER'S INVOICE, FOR THE PERIOD OF TIME AS FOLLOWS:
a. LIMITED ONE HUNDRED (100) YEAR WARRANTY AGAINST STRUCTURAL FAILURE
DUE TO WEATHER CORROSION OR DEFECTS IN MATERIALS AND WORKMANSHIP ON ALUMINUM DECK POSTS, STEEL DECK POSTS, CLAMPING/FASTENING (VERSALOK®), AND ASSOCIATED FASTENING HARDWARE.
b. LIMITED FIFTEEN (15) YEAR WARRANTY AGAINST STRUCTURAL FAILURE DUE TO WEATHER CORROSION OR DEFECTS IN MATERIALS AND WORKMANSHIP ON STEEL SUPPORT LEGS AND MIRA-THERM™ II COMPONENTS ON MEGA TOWER®, TOTS' CHOICE®, KIDS' CHOICE®, CENTER STAGE®, NEXUS® AND BOULDER RIDGE® ROCK WALL; ON PLAYSYSTEM STEEL COMPONENTS INCLUDING RAILINGS, RUNGS, AND RIGID CLIMBERS, AND ROCKITE®.

B. LIMITED ONE (1) YEAR WARRANTY AGAINST STRUCTURAL FAILURE CAUSED BY DEFECTIVE MATERIALS OR DEFECTIVE WORKMANSHIP ON TODDLERS' CHOICE® MAIN SUPPORT MATERIALS AND DECKS.

C. D. LIMITED ONE (1) YEAR WARRANTY STRUCTURAL FAILURE CAUSED BY DEFECTIVE MATERIALS OR DEFECTIVE WORKMANSHIP ON SLASHPROOF SEATS AND 360 DEGREE BUCKET TOT SEATS FOR SWINGS.

D. LIMITED ONE (1) YEAR WARRANTY AGAINST STRUCTURAL FAILURE DUE TO DEFECTS IN MATERIALS AND WORKMANSHIP FOR ALL PRODUCTS AND COMPONENTS THAT ARE NOT SPECIFICALLY LISTED ABOVE, INCLUDING, WITHOUT LIMITATION ALL MOVING PARTS SUCH AS SWING HANGERS, SWIVELS, CHAINS, WHIRLS, TROLLEYS AND FLEXIBLE CLIMBERS.

E. REPAIRED OR REPLACEMENT PART(S) ARE ONLY WARRANTED FOR THE BALANCE OF THE ORIGINAL LIMITED WARRANTY. THESE LIMITED WARRANTIES DO NOT INCLUDE FADING OF COLORS, DAMAGE DUE TO EXCESSIVE WEAR AND TEAR, VANDALISM, OR NEGLIGENCE. THESE WARRANTIES ARE VALID ONLY IF PRODUCTS ARE INSTALLED ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2. 1.F.2. THE CONTRACTOR SHALL GUARANTEE INSTALLATION WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING MANUFACTURER MATERIAL WARRANTY ITEMS WITH THE MANUFACTURER/DISTRIBUTOR AND FOR THE INSTALLATION OF REPLACEMENT MATERIAL(S) AT NO ADDITIONAL COST TO THE OWNER.

3. 1.F.3. PROVIDE COPY OF CONTRACTOR'S INSTALLATION WARRANTY ON COMPANY LETTERHEAD.

PART 2. MATERIALS

1. 2.A. EQUIPMENT: SEE DRAWINGS FOR TYPE, STYLE, CONFIGURATION, SIZE AND HEIGHT OF PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT TO BE PROVIDED.

2. 2.B. COLOR SCHEDULES: SEE DRAWINGS FOR THE COLOR SCHEDULES OF THE VARIOUS ELEMENTS OF PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT TO BE PROVIDED.

3. 2.C. SPECIFICATIONS/COMPONENTS:

2.C.1. DESIGNS AND SPECIFICATIONS ARE BASED UPON EQUIPMENT FROM MIRACLE RECREATION EQUIPMENT COMPANY. EQUALS WILL BE CONSIDERED AGAINST THIS STANDARD OF QUALITY AND DESIGN AND WILL BE DETERMINED AT THE OWNER'S DISCRETION.

2.C.2. COMPONENT LIST:

MODEL NO.	DESCRIPTION	QTY
7145029	DECK	2
7145494	5" OD X 124" POST 549-4 (4'DECK)	5
714970129	ARCH BRIDGE	1
714670	CHAMELEON II SLIDE	1
714670EZ	ENTRY SECTION	1
71485149	TRANSFER POINT	1
7147284	BUMP & GLIDE SLIDE	1
7146706	LEFT SECTION	1
714670PZ	CHAMELEON II SLIDE	1
714808	CLIMBING POLE	1
714672FR	PLAYCOVER UMBRELLA 12', FLAME RETARDANT	1
7148172B	BENCH (BELOW DECK)	1
7147149HB	1/2 ROLLER RACER (BELOW DECK)	1
714796P1	BELL	1
7145505	5" OD X 219" TOPPER 550-5 (5' DECK)	1
7148109	1' ADA STAIR	1
7145039	DECK	2
7145506	5" OD X 243" TOPPER 550-6 (6'6" DECK)	6
71486715	VINE CLIMBER	1
714669626FR	PLAYCOVER HEXAGON SHADE 26', FLAME RETARDANT	1
714782	CRUNCH STATION	1
7146144	WEB BRIDGE 4' DECK TO 4M PEGASUS	1
714552	5" OD X 136" POST 552 (3'-5' DECK)	2
4424	PEGASUS	1
71474959U	405 TYPHOON SLIDE DOMED WAVE	1
71460213B	STEEL COUNTER PANEL (BELOW DECK)	1
7146155	MONSTER PIPE STRAIGHT	1
947	BARREL RIDE	1
6086	BUDDY ROCKER	1
6086A2B	BUDDY ROCKER OPTIONAL BACK PANEL	1
71471311	SENSORY PANEL TEXTURED STAR CIRCLE	1
7147133B	WINDOW (BELOW DECK)	1
714815	VERTICAL LADDER	1

PART 3. INSTALLATION

2.A. INSTALLATION

1. 3.A.1. INSTRUCTIONS: EXPLICIT, PRINTED INSTALLATION INSTRUCTIONS, WRITTEN IN ENGLISH, SHALL BE PROVIDED BY THE MANUFACTURER, WHICH SHALL INCLUDE DETAILED, SCALED PLAN VIEWS, ELEVATIONS, AND FOOTINGDRAWINGS AND DETAILS WHEN APPLICABLE, AS WELL AS SEQUENTIAL ASSEMBLY INSTRUCTIONS TO ASSURE PROPER INSTALLATION OF THE PLAYGROUND EQUIPMENT, STRUCTURE OR MODULAR UNIT.

2. 3.A.2. EQUIPMENT MUST BE INSTALLED BY A MANUFACTURER-CERTIFIED INSTALLER AND MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALLATION CREW LEADER MUST BE CPSI-CERTIFIED. IF NOT INSTALLED BY A MANUFACTURER-CERTIFIED INSTALLER, THE EQUIPMENT SHALL BE INSPECTED AFTER INSTALLATION BY A CPSI NOT EMPLOYED BY THE INSTALLER AND SIGNED OFF BY SAID CPSI BEFORE THE PLAYGROUND IS OPENED FOR FIRST USE.

3. 3.A.3. CLOSE OUT: CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE COPY OF COMPLETE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND MAINTENANCE KIT IF PROVIDED. MOST MANUFACTURERS SEND AT LEAST TWO SETS OF INSTALLATION MANUALS WITH EACH ORDER. ADDITIONAL SETS OF INSTALLATION INSTRUCTIONS SHOULD BE PURCHASED FROM THE MANUFACTURER IF ORIGINALS ARE LOST OR DAMAGED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE INSTALLATION INSTRUCTIONS FROM THE INSTALLER. MIRACLE RECREATION MAILS ONE COMPLETE SET OF INSTALLATION INSTRUCTIONS DIRECTLY TO THE OWNER, AND THE CONTRACTOR SHALL NOT BE REQUIRED TO SUPPLY ADDITIONAL SETS TO THE OWNER.

4. 3.A.4. CLEAN-UP: THE SITE SHALL BE KEPT CLEAN AND FREE OF TOOLS, TRASH, DEBRIS AND INSTALLATION MATERIALS ON A DAILY BASIS. MATERIAL MAY BE STORED ON SITE DURING INSTALLATION WITH APPROPRIATE PROTECTIVE MEASURES AND APPROVAL BY THE OWNER'S REPRESENTATIVE.

END OF SECTION

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

STUDIO W ARCHITECTS

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRIAN P WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 04/10/2024	

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REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS

DATE	
○	DSA PLAN CHECK
○	DSA BACK CHECK
○	BIDDING
○	CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

L.U.C.H.A.ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

SPECIFICATIONS

Date 07/27/2023	Project Number 23013
Application Number 01-121121	Drawing Number A2.2
Drawn KT	
Author DH	

SECTION 32 18 16.13 - ENGINEERED WOOD FIBER

PART 1 - GENERAL

WORK DETAILS

THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE INSTALLATION OF ROBERTSON ENGINEERED WOOD FIBER IN ACCORDANCE WITH THESE SPECIFICATIONS, AND IN CONFORMITY WITH THE DIMENSIONS AND NOTES SHOWN IN THE PLANS.

EQUIVALENT PRODUCTS MAY BE SUBMITTED FOR REVIEW.

QUALITY ASSURANCE AND COMPLIANCE DETAILS

ACCESSIBILITY OF SURFACE SYSTEMS - ASTM F1951: DETERMINATION OF ACCESSIBILITY OF SURFACE SYSTEMS UNDER AND AROUND PLAYGROUND EQUIPMENT.

IMPACT ATTENUATION - ASTM F1292-18: IMPACT ATTENUATION OF SURFACE SYSTEMS UNDER AND AROUND PLAYGROUND EQUIPMENT.

STANDARD FOR ENGINEERED WOOD FIBER - ASTM F2075: MINIMUM CHARACTERISTICS FOR THOSE FACTORS THAT DETERMINE PARTICLE SIZE, CONSISTENCY, PURITY AND ABILITY TO DRAIN.

IPEMA CERTIFICATION: MANUFACTURER MUST PROVIDE PROOF OF CERTIFICATION, "IN THE INTEREST OF PUBLIC PLAYGROUND SAFETY, IPEMA PROVIDES AN INDEPENDENT LABORATORY WHICH VALIDATES A MANUFACTURER'S CERTIFICATION OF CONFORMANCE TO ASTM F1292-18 AND ASTM F2075. A LIST OF CURRENT VALIDATED PRODUCTS, THEIR THICKNESS AND CRITICAL HEIGHTS MAY BE VIEWED AT WWW.IPEMA.ORG."

PART 2 - MATERIAL DATA

PRODUCT IS MANUFACTURED OF A GROUND WOOD FIBER COMPRISED OF SOFTWOODS AND/OR HARDWOODS, CONSISTING OF RANDOMLY SIZED WOOD FIBERS THE MAJORITY OF WHICH DO NOT EXCEED 2" IN LENGTH AND NO MORE THAN 15% FINES TO AID IN COMPACTION.

PRODUCT TO HAVE MINIMAL BARK AND TO BE FREE OF TWIGS, LEAF DEBRIS AND OTHER ORGANIC MATERIAL.

PRODUCT DEPTH, AFTER INSTALLATION, MUST BE IN ACCORDANCE WITH THE PROCEDURE DESCRIBED IN ASTM F1292-18 AND MEET GUIDELINES FOR CRITICAL HEIGHT AS SET FORTH BY THE CONSUMER PRODUCT SAFETY COMMISSION FOR USE OF WOOD PRODUCTS FOR PROTECTIVE SURFACING.

PART 3 - SUB-BASE TYPES & DETAILS

ROBERTSON ENGINEERED WOOD FIBER MAY BE INSTALLED OVER COMPACTED EARTH. IF IT IS DEEMED THAT ADDITIONAL DRAINAGE IS NECESSARY; A LAYER OF GRAVEL CAN ALSO BE A SUITABLE SUBSTRATE.

PART 4 - SITE PREPARATION AND REQUIREMENTS

FOR IN-GROUND (I.E. ON GRADE) INSTALLATIONS, EXCAVATE AREA TO PROPER DEPTH (12 IN. FOR 12 IN. SYSTEM, 8 IN. FOR 8 IN. SYSTEM).

BOTH IN-GROUND AND ABOVE-GROUND SYSTEMS MUST BE PROPERLY GRADED. A (1) PERCENT GRADE IS RECOMMENDED FOR PROPER DRAINAGE. ROBERTSON ENGINEERED WOOD FIBER SYSTEMS SHOULD NOT BE INSTALLED ON GRADES EXCEEDING 10 PERCENT. SUBSTRATE (FOR BOTH IN-GROUND AND ABOVE- GROUND SYSTEMS) MUST BE FIRMLY COMPACTED, ESPECIALLY WHEN ADDITIONAL FILL MATERIAL HAS BEEN PROVIDED. THE SUBSTRATE SHOULD BE FREE OF STONES, ROOTS AND OTHER VEGETATION.

PART 5 - INSTALLATION

ROBERTSON RECOMMENDS THAT ALL MATERIALS PROVIDED BY ROBERTSON, INCLUDING PRODUCT DATA, SPECIFICATIONS, INSTALLATION INSTRUCTIONS AND MAINTENANCE PROCEDURES, AS WELL AS ALL SITE-SPECIFIC PLANS, INSTRUCTIONS AND SPECIFICATIONS, BE REVIEWED BY A CERTIFIED ENGINEER, ARCHITECT OR LANDSCAPE ARCHITECT FAMILIAR WITH LOCAL SOIL AND CLIMATIC CONDITIONS.

FURTHER, PURCHASER SHOULD DETERMINE AND SPECIFY FALL HEIGHTS AND EQUIPMENT USE ZONES AS REQUIRED BY THE CONSUMER PRODUCT SAFETY COMMISSION'S *HANDBOOK FOR PLAYGROUND PUBLIC SAFETY*, APPLICABLE ASTM STANDARDS, AND STATE AND LOCAL CODES AND REGULATIONS.

INSTALLATION INSTRUCTIONS

1. INSTALL PLAYGROUND EQUIPMENT
2. FOR ABOVE-GROUND SYSTEMS, INSTALL RETAINING WALL.
3. INSTALL APPLICABLE DRAINAGE SYSTEM.
4. IF MANUFACTURED DRAINAGE IS BEING USED, THE TERRAFLOW SHOULD BE LAID OUT IN PARALLEL STRIPS ON SIX-FOOT CENTERS. THE STRIPS MUST RUN FROM THE HIGH SIDE OF THE PLAYGROUND TO THE LOW SIDE. TERRAFLOW DRAINS SHOULD BE PLACED DIRECTLY ON THE SUB-GRADE AND SHOULD BE COVERED WITH GEOTEXTILE CLOTH AFTER LAYOUT IS COMPLETE. AS AN OPTION FOR PLAYGROUNDS WITH POOR DRAINAGE, A TERRAFLOW HEADER STRIP MAY BE CUT AND PLACED PERPENDICULARLY TO THE PARALLEL STRIPS ALREADY IN PLACE. THIS HEADER STRIP SHOULD BE PLACED ON THE LOW END OF THE PLAYGROUND. ANY JOINTS CAN BE TAPED WITH A WATERPROOF TAPE TO MAXIMIZE DRAINAGE.

5. IF GRAVEL DRAINAGE IS USED, PLACE 3 IN. OF DRAINAGE GRAVEL ON A LAYER OF GEOTEXTILE FABRIC. THE LOWER END OF THE SITE SHOULD BE CONNECTED TO DRAINAGE TO CHANNEL COLLECTED WATER AWAY FROM THE SITE. OVERLAP ALL SEAMS A MINIMUM OF 3 IN. SLIT FABRIC TO FIT AROUND EQUIPMENT UPRIGHTS. WHERE POSSIBLE, OVERLAP ALL SLITS WITH NEXT PIECE OF FABRIC.
6. COVER DRAINAGE SYSTEM (EITHER MANUFACTURED DRAINAGE OR GRAVEL) OR EARTH SUBSTRATE WITH GEOTEXTILE FABRIC. OVERLAP ALL SEAMS A MINIMUM OF 3 IN. SLIT FABRIC TO FIT AROUND EQUIPMENT UPRIGHTS. WHERE POSSIBLE, OVERLAP AT SLITS WITH NEXT PIECE OF FABRIC.
7. WITH PERMANENT MARKER OR WARNING LABEL, MARK UPRIGHTS OF EQUIPMENT WITH COMPACTED SYSTEM DEPTH (I.E. 8 IN. OR 12 IN.).
8. INSTALL THE ROBERTSON ENGINEERED WOOD FIBER TO THE PROPER DEPTH, MOUNDING IN THE CENTER OF THE PLAY AREAS OF THE PLAYGROUND. EXTRA MATERIALS WILL BE PROVIDED TO ALLOW FOR COMPACTION. USE A SMALL FRONT-END LOADER TO SPREAD SURFACING. OPERATOR SHOULD BE CAREFUL NOT TO TRAVEL ON THE FABRIC OR TURN SHARPLY ON THE ROBERTSON ENGINEERED WOOD FIBER. IT WILL ALSO BE NECESSARY TO SPREAD MANUALLY. INSTALL ALL THE MATERIAL DELIVERED AND PLEASE NOTE THAT THE SURFACING WILL BE SEVERAL INCHES ABOVE GRADE UNTIL IT COMPACTS. ROBERTSON ENGINEERED WOOD FIBER NEEDS TO BE COMPACTED IN ORDER TO BE CONSIDERED HANDICAPPED ACCESSIBLE. THIS CAN BE ACHIEVED OVER TIME AND USAGE, OR WITH A MECHANICAL COMPACTOR. SATURATING THE INITIAL LOAD WITH WATER WILL HELP WITH COMPACTION.
9. INSTALL ROBERTSON WEAR MATS IN EXCESSIVE WEAR AREAS, SUCH AS SLIDE EXITS, UNDER SWINGS, AND SLIDING POLES.
10. FOR A SMOOTH FINISHED SURFACE, HAND RAKE. AFTER TWO WEEKS OF ACTIVE USE, SURFACE SHOULD BE RAKED AGAIN.

- *PERIODICAL ADJUSTMENTS OF ROBERTSON ENGINEERED WOOD FIBER ARE REQUIRED UNDER SLIDES, SWINGS AND OTHER CONCENTRATED USE ZONES. INSTALLING ROBERTSON MATS IN THESE AREAS WILL HELP CONTROL DISPLACEMENT IN THESE HIGH USE ZONES. WARNING: FAILURE TO MAINTAIN ROBERTSON ENGINEERED WOOD FIBER AT THE INITIAL INSTALLATION DEPTH MAY RESULT IN AN INJURY AND VOID YOUR WARRANTY.*

PART 6 - WARRANTY

ROBERTSON ENGINEERED WOOD FIBER COMES WITH A 25-YEAR SYSTEM OR 15-YEAR PERFORMANCE WARRANTY. ASK YOUR ROBERTSON REPRESENTATIVE FOR A COPY OF OUR FULL ROBERTSON ENGINEERED WOOD FIBER WARRANTY.

PART 7 - MAINTENANCE

ASK YOUR ROBERTSON REPRESENTATIVE FOR A COPY OF OUR FULL ROBERTSON ENGINEERED WOOD FIBER MAINTENANCE DETAILS.

END OF SECTION

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DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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DRAWING STATUS

DATE
- ○ DSA PLAN CHECK
- ○ DSA BACK CHECK
- ○ BIDDING
- ○ CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

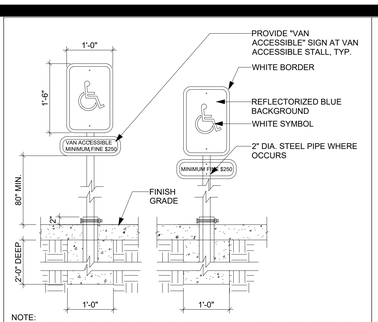
2930 GAY AVENUE,
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PROJECT STATUS

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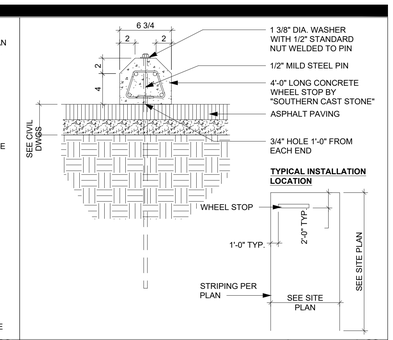
SPECIFICATIONS

Date 07/27/2023	Project Number 23013
Application Number 01-121121	Drawing Number A2.3
Drawn KT	
Author DH	

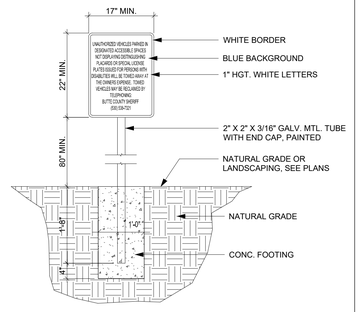


NOTE:
ACCESSIBLE SIGN TO BE LOCATED ON FACE OF COLUMN UNLESS NOTED OTHERWISE

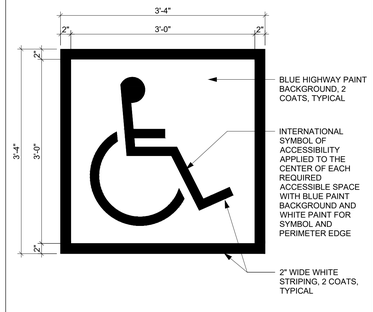
ACCESSIBLE STALL SIGNAGE 3/4" = 1'-0" 6



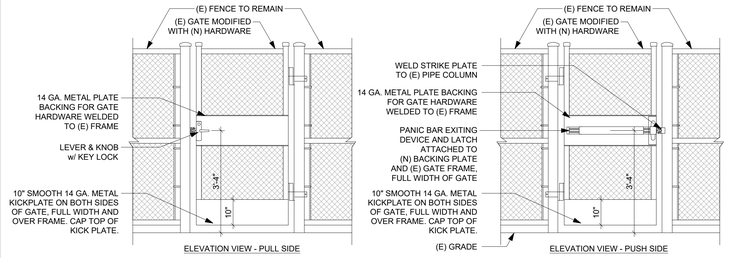
WHEEL STOP 1 1/2" = 1'-0" 1



TOW AWAY SIGN 3/4" = 1'-0" 7

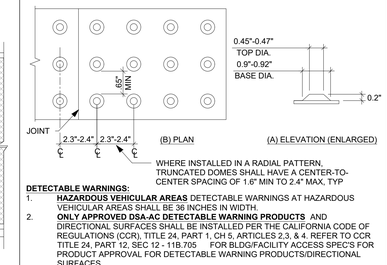


INTERNATIONAL SYMBOL OF ACCESSIBILITY 1" = 1'-0" 2



NOTES:
1. GRIND SMOOTH ALL WELDED JOINTS
2. ANY CAVITIES CREATED BY ADDING THE KICK PLATE SHALL BE CAPPED PER CBC 11B-404.2.10
3. SEE DETAIL 14/A10.2.1 FOR ADDITIONAL INFORMATION ON GATE HARDWARE.

(E) SINGLE GATE 1/2" = 1'-0" 8



DETECTABLE WARNINGS:
1. **HAZARDOUS VEHICULAR AREAS** DETECTABLE WARNINGS AT HAZARDOUS VEHICULAR AREAS SHALL BE 36 INCHES IN WIDTH.
2. **ONLY APPROVED DSA-AC DETECTABLE WARNING PRODUCTS** AND DIRECTIONAL SURFACES SHALL BE INSTALLED PER THE CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 1, CH 5, ARTICLES 2,3, & 4. REFER TO CCR TITLE 24, PART 12, SEC 12 - 11B.705 FOR BLDG/FACILITY ACCESS SPEC'S FOR PRODUCT APPROVAL FOR DETECTABLE WARNING PRODUCTS/DIRECTIONAL SURFACES.
3. **COLOR AND CONTRAST** THE MAT'L USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE SURFACE. WARNING SURFACES SHALL BE YELLOW AND APPROX. FS 33538 OF FEDERAL STD 595C OR SHALL PROVIDE A 70% MIN VISUAL CONTRAST W/ ADJ. WALKING SURFACES. (HAZARDOUS VEHICULAR AREAS SHALL ONLY ALLOW YELLOW, LISTED ABOVE)

TRUNCATED DOMES 1/4" = 1'-0" 3

HARDWARE:
P PANIC - SEE ALSO CODE ANALYSIS PLAN

FOR SPECIFIC FINISHES REFER TO MATERIAL LEGEND ON ROOM FINISH SCHEDULE SHEET.

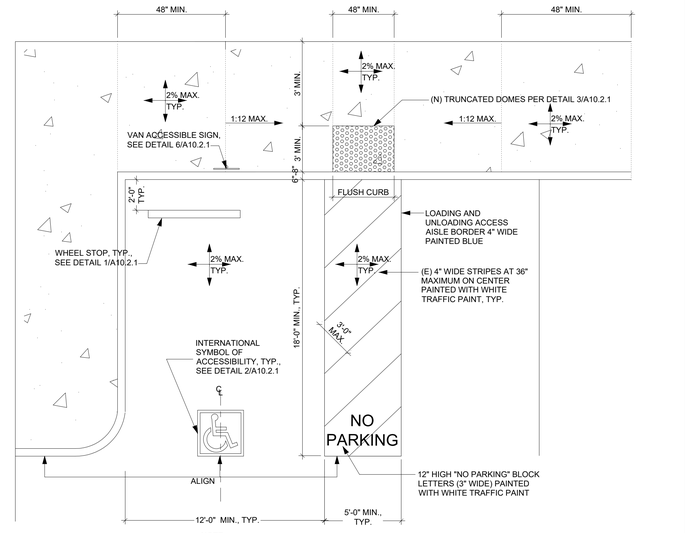
NOTE:
ALL GATES TO HAVE ROCKWOOD 468-RKW DOOR STOP INSTALLED

MANUFACTURERS ABBREVIATIOINS (MFR.)

BES =	BEST	CYLINDERS		
VON =	VON DUPRIN	EXIT DEVICES		
SCH =	SCHLAGE	LOCK AND LATCHES		
HARDWARE GROUP NO.01				
1 EA PANIC HARDWARE	CDSI-PA-AX-99-L-KC-06-WH		626	VON
2 EA CYLINDER/CORES	FURNISHED BY BEST		626	
1 EA ADA STOREROOM LOCK	ND81TD		626	SCH

BALANCE OF HARDWARE BY GATE FABRICATOR

GATE HARDWARE NTS 14



NOTE:
FOR ALL EXISTING STRIPING, VERIFY DIMENSIONS IN FIELD AND REVISE AS NECESSARY TO ACHIEVE REQUIRED DIMENSIONS

ENLARGED PLANS - (N) ACCESSIBLE PARKING 1/4" = 1'-0" 5

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APP: 01-121121 INC:
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DATE: 7/8/2024

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KEY PLAN

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SAN JOSE, CA 95116

SITE DETAILS

Date	Project Number
07/27/2023	23013
Application Number	Drawing Number
01-121121	A10.2.1
Drawn KT	
Author DH	

GENERAL NOTES

GENERAL
1. DIMENSIONS
   A. ALL MINIMUM CLEARANCE DIMENSIONS FOR PLUMBING FIXTURES ARE FROM FACE OF WALL FINISH TO CENTER OF FIXTURE, U.O.N.
   B. ALL DIMENSIONS MARKED "MIN. CLR" OR CLR." ARE TO/FROM FACE OF WALL FINISH (F.O.F.)
2. (E) FLOOR DRAIN TO REMAIN.

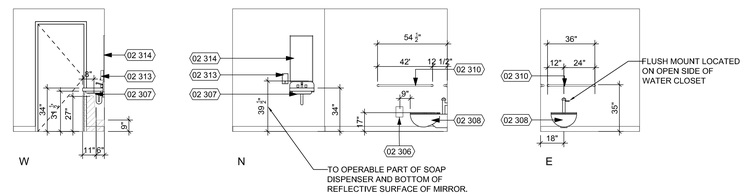
ACCESSORIES
1. ALL RESTROOM FIXTURES AND ACCESSORIES MOUNTING HEIGHTS AND LOCATIONS TO USE ADULT DIMENSIONS
2. GENERAL CONTRACTOR TO FIELD VERIFY ALL RESTROOM ACCESSORIES. FOR TYPICAL RESTROOM ACCESSORY MOUNT HEIGHTS, ACCESSIBLE DIMENSIONS, SEE SHEET A10.10.2. REMOVE, RELOCATE AND/OR REPLACE ALL ACCESSORIES LOCATED ON OR WITHIN WALLS SHALL BE INSTALLED AND SEALED TO PROTECT STRUCTURAL ELEMENTS FROM MOISTURE (CBC SECTION 12102.2)

STALLS AND PARTITIONS
1. ALL ACCESSIBLE TOILET PARTITIONS DOORS TO BE 36" WIDE MINIMUM AND ALL NON-ACCESSIBLE TOILET PARTITION DOORS SHALL NOT BE LESS THAN 2'-2".
2. FLUSH VALVE TO BE RELOCATED AT WIDE OF STALL/SPACE.

LEGEND

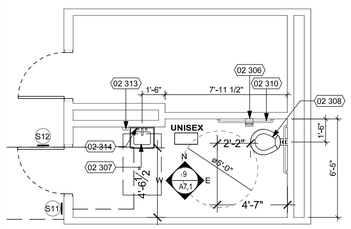
30" X 48" ACCESSIBLE CLEAR SPACE

60" DIAMETER ACCESSIBLE CLEAR SPACE



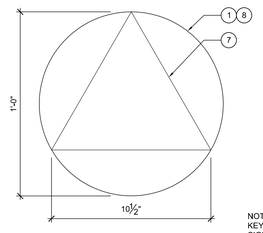
GENERAL NOTE:
IF ANY DIMENSIONS ARE NON- COMPLIANT PER DRAWINGS, ADD TO SCOPE TO BRING INTO COMPLIANCE

UNISEX STAFF ELEVATION 1/4" = 1'-0" 6



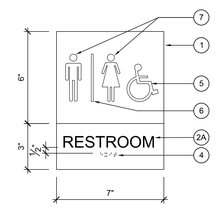
ENLARGED UNISEX STAFF RESTROOM 1/4" = 1'-0" 1

UNISEX DOOR SIGNAGE 3" = 1'-0" 21



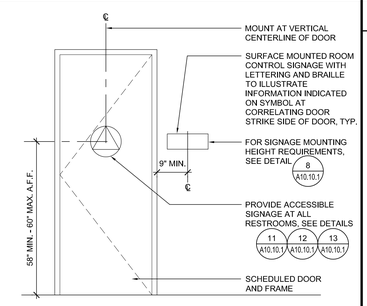
NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

UNISEX WALL MOUNTED SIGNAGE 3" = 1'-0" 16

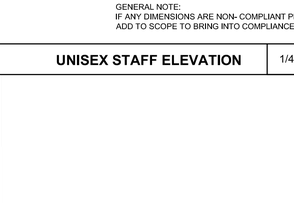


NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

ROOM CONTROL SIGNAGE 1/2" = 1'-0" 11



GIRLS DOOR SIGNAGE 3" = 1'-0" 22



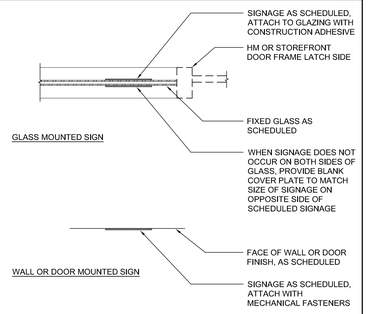
NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

GIRLS WALL MOUNTED SIGNAGE 3" = 1'-0" 17



NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

SIGNAGE MOUNTING TYPES 1" = 1'-0" 12



BOYS DOOR SIGNAGE 3" = 1'-0" 23

NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

BOYS WALL MOUNTED SIGNAGE 3" = 1'-0" 18

NOTE: FOR SIGNAGE KEYNOTE LEGEND AND SIGNAGE GENERAL NOTES, SEE DETAIL 2 / A10.10

SIGNAGE MOUNTING HEIGHTS 6" = 1'-0" 13

KEY NOTES

NUMBER	NOTE
02 114	(E)DRINKING FOUNTAIN TO REMAIN
02 306	(E)PAPER TOILET DISPENSER TO REMAIN
02 307	(E)WALL MOUNTED LAVATORY TO REMAIN
02 308	(E)WALL MOUNTED WATER CLOSET TO REMAIN
02 309	(E)TOILET PARTITIONS TO REMAIN
02 310	(E)GRAB BARS TO REMAIN
02 311	(E)PAPER TOWEL DISPENSER TO REMAIN
02 312	(E)HAND DRYER TO REMAIN
02 313	(E)SOAP DISPENSER TO REMAIN
02 314	(E)MIRROR TO REMAIN
02 315	(E)TOILET SEAT COVER DISPENSER TO REMAIN
02 316	(E)TOILET PAPER DISPENSER TO REMAIN
02 317	(E)GENDER DOOR SIGN TO REMAIN
02 318	(E)ROOM SIGN TO REMAIN

SIGNAGE LEGEND

S11 UNISEX WALL MOUNTED SIGN, SEE DETAIL

S12 UNISEX DOOR SIGN, SEE DETAIL

TYPICAL SIGNAGE NOTES

SIGNAGE GENERAL NOTES

1. FOR TYPICAL MOUNTING DISTANCE FROM DOOR FRAME, SEE DETAIL 11 / A10.10.1
2. FOR MOUNTING ATTACHMENTS, SEE DETAIL 12 / A10.10..1
3. FOR SIGNAGE MOUNTING HEIGHT REQUIREMENTS, SEE DETAIL 12 / A10.10.1

SIGNAGE KEYNOTES

1. EXTRUDED CLEAR ACRYLIC SIGN WITH A NON GLARE BACKGROUND OF 70% CONTRASTING COLOR TO TEXT AND ONE PIECE CONSTRUCTION PER SPECIFICATIONS
   BACKGROUND COLOR: MP2160 SAILBOAT BLUE
   THICKNESS: 1/4"
2A. 1/32" RAISED TEXT, CENTER JUSTIFIED ON PLAQUE
   TEXT STYLE: HELVETICA, ALL CAPS
   TEXT HEIGHT: 3/4" U.O.N.
   TEXT COLOR: 951 WHITE
2B. NOT USED
3. NOT USED
4. CALIFORNIA ROUNDED TOP CONTRACTED GRADE 2 BRAILLE BELOW RAISED TEXT (11B-703.3.2). DISTANCE FROM BOTTOM OF RAISED LETTERS TO TOP OF BRAILLE CHARACTERS SHALL BE 3/8" MINIMUM AND 1/2" MAXIMUM. BRAILLE TO BE CENTER JUSTIFIED OR LEFT JUSTIFIED TO MATCH RAISED TEXT. FOR MORE INFORMATION ON BRAILLE REQUIREMENTS, SEE DETAIL 5 / A10.10.1
5. INTERNATIONAL SYMBOL OF ACCESSIBILITY PICTOGRAM
   COLOR: 951 WHITE
6. 1/8" WIDE RAISED DECORATIVE STRIPE
   COLOR TO MATCH TEXT
7. RAISED IMAGE
   COLOR: 951 WHITE
8. CONTRAST 70% WITH DOOR COLOR
9. EDGES SHALL BE EASED OR ROUNDED 1/16" MIN. OR CHAMFERED 1/8" MAX. (11B.703.7.2.6.4.)
10. EDGES SHALL BE EASED OR ROUNDED 1/16" MIN. OR CHAMFERED 1/8" MAX. VERTICES SHALL BE RADIUSED BETWEEN 1/8" MIN. - 1/4" MAX. (11B-703.7.2.6.4)

TYPICAL SIGNAGE NOTES 7

TABLE 11B-703.3.1
BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
DOT BASE DIAMETER	0.059" (1.5MM) TO 0.063" (1.6MM)
DISTANCE BETWEEN TWO DOTS IN THE SAME CELL *	0.100" (2.5MM)
DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS *	0.300" (7.6MM)
DOT HEIGHT RANGE	0.025" (0.6MM) TO 0.037 (0.9MM)
DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW *	0.395" (10MM) TO 0.400" (10.2MM)
* MEASURED CENTER TO CENTER	

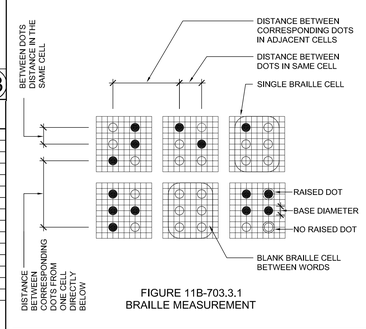


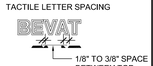
FIGURE 11B-703.3.1
BRAILLE MEASUREMENT

CROSS SECTION VISUAL/TACTILE CHARACTERS



CHARACTER SPACING

TACTILE LETTER SPACING



NOTE:

(A) "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE "T"

(B) STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER

WIDTH TO HEIGHT RATIO	STROKE TO HEIGHT RATIO
60% - 110% SEE NOTE (A)	15% MAX SEE NOTE (B)

FONT RATIO



MINIMUM 70% CONTRAST DIFFERENCE BETWEEN CHARACTERS/GRAPHICS AND BACKGROUND

CONTRAST

SIGNAGE DESIGN REQUIREMENTS 1-1/2" = 1'-0" 5

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

STUDIO W ARCHITECTS

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ARCHITECT	ENGINEER
LICENSED ARCHITECT BRIAN P WHITMORE No. C 30345 Ren. 9/30/25 STATE OF CALIFORNIA DATE SIGNED: 04/12/2024	

GENERAL NOTES
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REVISION HISTORY

NO.	REMARKS	DATE

DRAWING STATUS — DATE
- DSA PLAN CHECK
- DSA BACK CHECK
- BIDDING
- CONSTRUCTION

KEY PLAN

ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT
2930 GAY AVENUE,
SAN JOSE, CA 95127

PROJECT STATUS

LUCHA ELEMENTARY SCHOOL:
PLAY, SHADE AND PC SHADE STRUCTURE & CODE REQUIRED ACCESSIBILITY UPGRADES
1711 E SAN ANTONIO STREET,
SAN JOSE, CA 95116

SPECIALTIES

Date	Project Number
07/27/2023	23013
Application Number	Drawing Number
01-121121	A10.10.1
Drawn KT	
Author DH	

GENERAL NOTES

1.- THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING, UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2022 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

2.- FOUNDATION DESIGN BASED ON CBC 2022, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

3.- DESIGN PER FOLLOWING CODES: CBC 2022 (CHAPTER 35), ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-19, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL
1.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY USA SHADE & FABRIC STRUCTURES. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2022 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY USA SHADE & FABRIC STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2022 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

4.- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500 GRADE C, IN ITS' ENTIRETY.
TYPICAL MECHANICAL PROPERTIES ARE:
ROUND TUBE GRADE C 50,000 PSI YIELD STRESS / 62,000 PSI TENSILE STRESS

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE C, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:
ROUND HSS 50,000 PSI YIELD STRESS / 62,000 PSI TENSILE STRESS

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

7.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

8.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

9.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

10.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE. ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. GMAW IS ACCEPTABLE.

11.- ALL STEEL BOLTS SHALL COMPLY WITH ASTM A307 (GALVANIZED) GRADE A, TENSILE STRENGTH= 60 KSI, ELONGATION % = 18. ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ASTM A307 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS. BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION (ST).

12.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:
- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247).
- SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.

13.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

14.- ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329) AS APPLICABLE, OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

CONCRETE SPECIFICATION
1.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2022 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'c= 4500 PSI, TYPE V CEMENT PLUS POZZOLAN OR SLAG CEMENT, MAXIMUM WATER/CEMENT RATIO OF 0.45, PER ACI 318-19 CHAPTER 19. (NO ADMIXTURES CONTAINING CALCIUM CHLORIDE WILL BE USED.) REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 AND TO BE Fy= 60000 PSI , MIN. GR. 60. ALSO COATED ACCORDING TO ASTM A767/ A767M, STANDARD SPECIFICATION FOR ZINC-COATING (GALVANIZED) STEEL BARS FOR CONCRETE REINFORCEMENT.

3.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

4.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

FABRIC SPECIFICATION
1.- FABRIC SHALL BE MANUFACTURED BY GALE PACIFIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS. MINIMUM SEAM LENGTH 3/4".

2.- THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.

3.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.

4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FIRE TEST ON FABRIC: NFPA 701 TEST 1 & 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 8. SMOKE DEVELOPED INDEX (SDI): 6. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.

5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.

6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

AIRCRAFT CABLE

1.- FOR FABRIC ATTACHMENT USE 1/4" 7x19 GALV. CABLE PER ASTM A1023/A1023M WITH A BREAKING STRENGTH VALUE OF 7,000 LBS. CABLE SHALL BE TENSIONED TO 300 LBS MINIMUM AND 500 LBS MAXIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=2386 LB.

2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.

CBC DESIGN NOTES

BUILDING CODE	CBC 2022 (BASED ON IBC 2021)
FLOOR LIVE LOAD	N/A
ROOF LIVE LOAD	RLL 5 PSF

ALLOWABLE SOIL PRESSURE:

DL + LL (CONC FTG)	1500 PSF
DL + LL + SEISMIC (CONC FTG)	1500 PSF
LATERAL BEARING DESIGN VALUE	100 PSF/FT BELOW NATURAL GRADE, PER TABLE 1806A.2

PER CBC SECTION 1806A.3.4.
ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM
BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE).
UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ROOF SNOW LOAD	5 PSF
ICE LOAD	ZERO PSF
FLOOD HAZARD AREA	ZONE X

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2
NOTE: WIND DESIGN IS LIMITED TO UNOBSTRUCTED CLEAR FLOW CONDITION

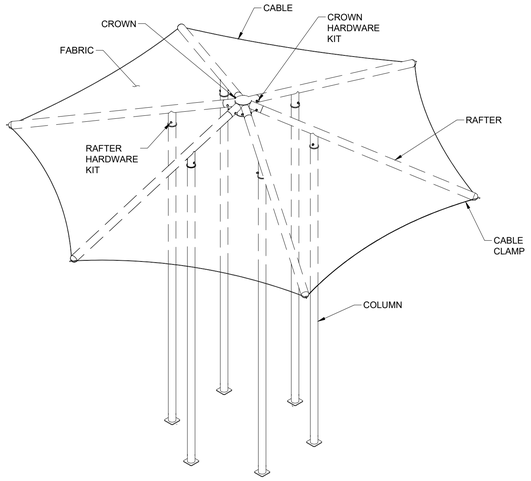
-BASIC DESIGN WIND SPEED (3 SEC GUST)	V	92 MPH
-ASD WIND LOAD (CBC 2022 SEC. 1603A.1.4)	V_{ASD}	71 MPH
-WIND EXPOSURE FACTOR	C	
-TOPOGRAPHIC FACTOR	Kzt	1
-RISK CATEGORY	II	
-VELOCITY PRESSURE EXPOSURE COEFFICIENT	Kz	0.85
-VELOCITY PRESSURE	qz	15.66 PSF

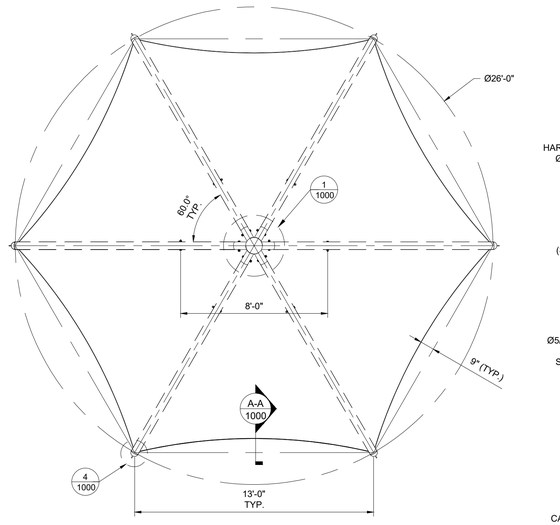
SEISMIC DESIGN:

-SITE CLASS	D	
	SS	1.639g
	S1	0.619g
-SPECTRAL RESPONSE COEFFICIENTS	SDS	1.092
	SD1	0.702
-LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN SYSTEM.		
-SEISMIC IMPORTANCE FACTOR	Ie	1.00
-DESIGN BASE SHEAR AT BASE	V	1278 LB
-SEISMIC RESPONSE COEFFICIENTS	Cs	0.87
-RESPONSE MODIFICATION FACTOR (ORDINARY CANTILEVER COLUMN SYSTEM)	R	1.25
-ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE	
-RISK CATEGORY	II	
-SEISMIC DESIGN CATEGORY		D
-SITE COEFFICIENT CATEGORY	Fa	1.0
-REDUNDANCY FACTOR	ρ	1.3

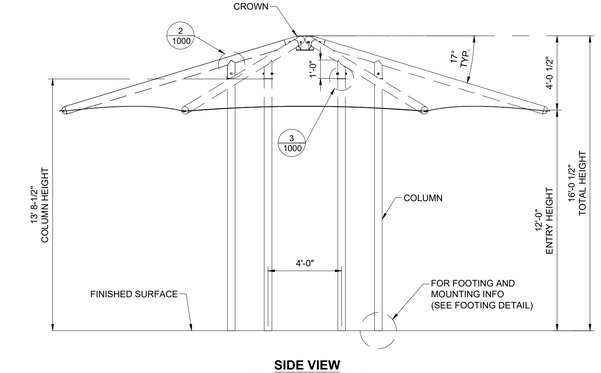
CODE ANALYSIS

BUILDING	OCCUPANCY	CONSTRUCTION TYPE	AREA (SQF)	OCCUPANT LOAD
SHADE STRUCTURE Ø26'-0"	E	V-B	439	N/A

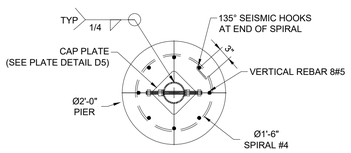




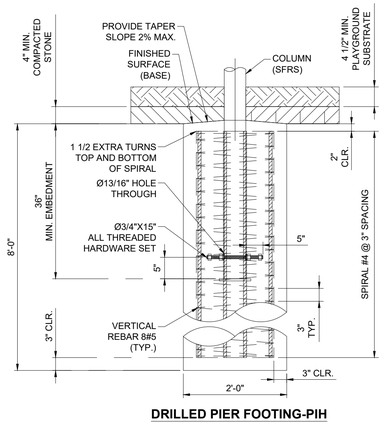
TOP VIEW



SIDE VIEW
SHADE STRUCTURE TO HAVE MIN 7'-0" HEAD HEIGHT ABOVE ADJACENT PLAY EQUIPMENT PLATFORMS



DRILLED PIER TOP VIEW



DRILLED PIER FOOTING-PIH
(EMBEDDED, PIH)
(USE FOR NON-CONSTRAINED CASES)

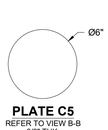


PLATE C5
REFER TO VIEW B-B
3/8" THK.
(A572 GR 50)

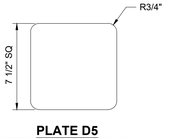


PLATE D5
REFER TO DRILLED PIER TOP VIEW
3/8" THK.
(A572 GR 50)

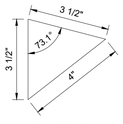


PLATE B5
REFER TO VIEW B-B
3/8" THK.
(A572 GR 50)

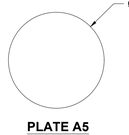
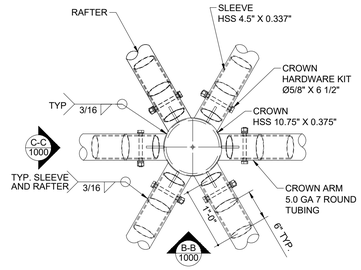


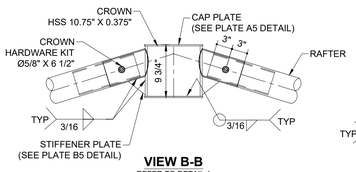
PLATE A5
REFER TO VIEW B-B
1/4" THK.
(A572 GR 50)

LIST OF MATERIALS

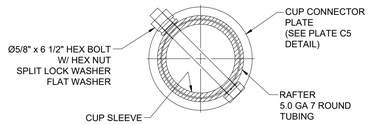
DESCRIPTION	MATERIAL
COLUMN	5.0 GA 7 RD TUBING (CHS 5.0" X 0.180)
RAFTER	5.0 GA 7 RD TUBING (CHS 5.0" X 0.180)
CROWN	CROWN HSS 10.75" X 0.375" ARMS 5.0 GA 7 RD TUBING (CHS 5.0" X 0.180)
FABRIC	COMMERCIAL 95-340FR
90 FT OF Ø1/4" STEEL CABLE	GALVANIZED STEEL
Ø1/4" CABLE CLAMP	GALVANIZED STEEL
Ø5/8"-11NC x 6.5" HEX BOLT	ASTM A307 GRADE A GALVANIZED
Ø5/8"-11NC HEX NUT	ASTM A563DH GALVANIZED
Ø5/8" SPLIT LOCK WASHER	ASTM F2329M-2015 ZINC COATED
Ø5/8" FLAT WASHER	ASTM F436 GALVANIZED
Ø 3/4"-10NC x 15" ALL THREADED ROD	ASTM A449 GALVANIZED
Ø3/4"-10NC HEX NUT, DH WAXED	ASTM A563DH GALVANIZED
Ø3/4" FLAT WASHER	ASTM F436 GALVANIZED



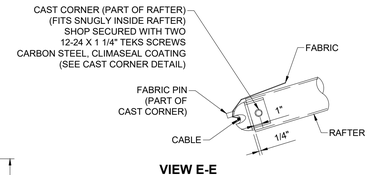
DETAIL 1
REFER TO TOP VIEW



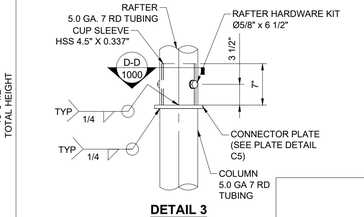
VIEW B-B
REFER TO DETAIL 1



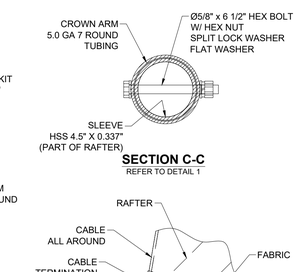
SECTION D-D
REFER TO DETAIL 3



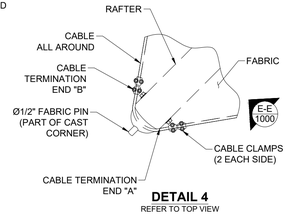
VIEW E-E
REFER TO DETAIL 4



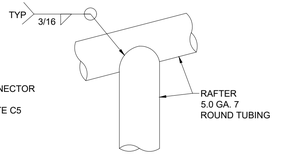
DETAIL 3
REFER TO SIDE VIEW



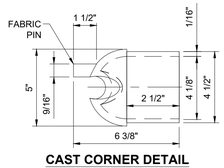
SECTION C-C
REFER TO DETAIL 1



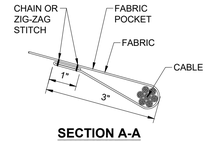
DETAIL 4
REFER TO TOP VIEW



DETAIL 2
REFER TO SIDE VIEW



CAST CORNER DETAIL
(APPLIES TO ALL RAFTERS)
ASTM B26 ANSI 351
REFER TO VIEW E-E



SECTION A-A
REFER TO TOP VIEW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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PlayPower
Inspiring the world to play.
CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

CERTIFICATIONS:
IAS CERTIFICATION No: FA-428
CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:
MIRACLE PLAYGROUND SALES

PROJECT NAME:
L.U.C.H.A. ES

LOCATION:
SAN JOSE CA

MODEL NUMBER:
85948

STRUCTURE TYPE:
INTEGRATED HEXAGON DSA

SIZE: MAXIMUM
Ø26' x 12'e

SCALE : NONE

DRAWING SIZE:
D

Eng. By :	MS	04/02/24
Design By :	QD	04/02/24
Approved By :	DT-JC	04/02/24

DRAWING DESCRIPTION:
PRODUCT INFOMATION

DWG.
85948-1.0

SHEET
26'Ø 1000

REV.
NC

REGISTERED PROFESSIONAL ENGINEER
MARK ALBERT STEVE
No. 3693
STRUCTURAL
STATE OF CALIFORNIA
6/28/2024

Commercial
NinetyFive 340FR

PRODUCT PROFILE



Commercial NinetyFive 340 FR, the flame retardant version of the most trusted HDPE shade fabric in the industry, is a mid-weight, flame retardant fabric that delivers the utmost in versatility. Available in 22 vibrant and on-trend colors, Commercial NinetyFive 340 FR can fulfill almost any HDPE design requirement.

- A mid-weight, 340 gsm fabric suitable for applications spanning a wide array of sizes and designs,
- Provides the optimal combination of sun protection, strength, and durability to ensure low maintenance, and long-life performance
- The most expansive color assortment in the HDPE shade fabric market. Offering 22 rich, vibrant and on-trend colors to fulfill a wide range of design requirements.
- Each color individually tested and meets the most stringent FR certification criteria
- Industry-leading stentering process provides premium lay flat characteristics to assist with accurate design and fabrication
- Backed by a full 10-year warranty against UV degradation and designed to withstand the world's harshest environments
- 100% Lead and Phthalate free

FLAMMABILITY

CSFM Title 19 1237.1
NFPA 701 Test Methods 1 & 2
ASTM E84 19B

Each color individually tested and passes all certification criteria for above. Test results available upon request.
NFP92-503 Class M1 in process

FABRIC PROPERTIES

AS 2001.2.13 Mass per unit
Nominal fabric mass 340 gsm ± 20; ;10 oz/yd²
Approximate thickness 0.06 in. / 1.6 mm

ROLL SPECIFICATIONS

Nominal width:	9 ft. 10 in. / 3.0m (folded)
Length:	131 ft 3 in. / 40m
Approx. roll weight:	97 lbs. / 44 kg
Approx. roll diameter:	1.05 ft / 0.32 m
Core diameter:	1.38 in. / 35 mm

USAGE INSTRUCTIONS

Do not use against flames. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty. Biaxial elastic material properties available on request.

SUGGESTED SPECIFICATION

Shade cloth fabric shall be compliant to Australian standard AS 4174:2018 and shall be GALE Pacific Commercial NinetyFive 340 FR Knitted HDPE monofilament & tape shade fabric offering a UVE Protection from 90 to 96%.

PERFORMANCE

ASTM D5034
Tensile Strength and Elongation

Maximum Force – Warp (Mean)	158.6 lbf
Elongation at Maximum Force (Mean)	89%
Maximum Force – Weft (Mean)	412.3 lbf
Elongation at Maximum Force – Warp (Mean)	49%

ASTM D2261
Tearing Strength – Tongue (Single Rip)

Mean Force – Warp	43.0 lbf
Mean Force – Weft	39.6 lbf

ASTM D6797
Bursting Strength – Ball Burst (Constant Rate of Extension)

Mean Force	408 lbf

AS 4174:2018
Shade Protection Fabric Performance

Colour	Cover Factor	Shade Factor	UV-Vis Trans %	UVR Trans %	UVR Block %	UVE %	Protection Category
Aquatic Blue	92	88.1	11.9	8.5	91.5	91	Very Effective
Black	95	94.8	5.2	5.0	95.0	94	Very Effective
Bright Green	90	87.3	12.7	9.0	91.0	90	Effective
Brown	96	94.3	5.7	4.0	96.0	96	Most Effective
Brunswick Green	93	92.9	7.1	6.4	93.6	92	Very Effective
Cayenne	93	87.3	12.7	6.7	93.3	92	Very Effective
Cedar	93	88.4	11.6	6.4	93.6	93	Very Effective
Charcoal	93	93.6	6.4	6.1	93.9	92	Very Effective
Cherry Red	90	80.0	20.0	10.0	90.0	90	Effective
Deep Ochre	91	90.5	9.5	8.3	91.7	90	Effective
Desert Sand	93	86.1	13.9	6.6	93.4	92	Very Effective
Gun Metal	96	94.5	5.5	3.5	96.5	96	Most Effective
Natural	94	78.3	21.7	6.5	93.5	92	Very Effective
Navy Blue	94	93.1	6.9	6.2	93.8	93	Very Effective
Orange	92	80.8	19.2	7.6	92.4	91	Very Effective
Rivergum Green	94	89.7	10.3	6.0	94.0	93	Very Effective
Royal Purple	91	87.9	12.1	8.6	91.4	90	Effective
Sky Blue	94	91.3	8.7	6.0	94.0	93	Very Effective
Steel Grey	92	89.7	10.3	7.6	92.4	91	Very Effective
Turquoise	94	89.5	10.5	6.6	93.4	93	Very Effective
White	95	76.5	23.5	5.4	94.6	94	Very Effective
Yellow	93	77.5	22.5	6.8	93.2	92	Very Effective

Industrial Fabrics Association International · American Society of Landscape Architects · Oeko-Tex Confidence in Textiles

USA P 1800 560 4667 F +1 407 772 0553
AU P 1800 331 521 F +61 3 9518 3398
NZ P 0800 555 171 F 0800 555 172
UAE P +971 4 881 7114 F +971 4 881 7167

www.galecommercial.com

GALE PACIFIC

Rev:1-US 3/20

The above results are typical averages from quality assurance testing and are not to be taken as a minimum specification nor as forming any contract between GALE Pacific and another party. Due to continuous product improvement product specifications are subject to alteration without notice. As the use and disposal of this product are beyond GALE Pacific's control, regardless of any assistance provided without charge, GALE Pacific assumes no obligation or liability for the suitability of its products in any specific end use application. It is the customer's responsibility to determine whether GALE Pacific's products are appropriate for the specific application and complies with any legal & patent regulations.

AS Standards / ASTM Standards

	Commercial 9S 340	Commercial 9S 340 FR	Commercial 9S 340	Commercial 9S 340 FR
Performance				
Maximum force	warp 670 N/50mm	580 N/50mm	warp 189.1 lbf	158.6 lbf
Elongation at max. force	warp 117%	98%	warp 103.67%	88.7%
Maximum force	weft 2400 N/50mm	2000 N/50mm	weft 462.5 lbf	412.5 lbf
Elongation at max. force	weft 83%	71.5%	weft 63%	49%
Breaking force	warp 990 N	930 N		
Breaking force	weft 2000 N	2000 N		
Tear strength	warp 184 N	194 N	warp 52.2 lbf	43 lbf
Tear strength	weft 347 N	282 N	weft 52.2 lbf	39.6 lbf
Bursting pressure	3500 kPa	3600 kPa		
Bursting force	1937 N	1944 N	422 lbf	408 lbf
Fabric Properties				
Nominal Fabric Mass	340 gsm ± 20	340 gsm ± 20	340 gsm ± 20	340 gsm ± 20
Roll Specification				
Width	3m (folded)	3m (folded)	9 ft. 10 in. (folded)	9 ft. 10 in. (folded)
Length	40m	40m	131 ft. 3 in.	131 ft. 3 in.
Flammability Info	Flammability Index - 12 Ignitability Index - 10 Spread of Flame Index - 7 Heat Evolved Index - 5 Smoke Developed Index - 4	Flammability Index - 1 Ignitability Index - 13 Spread of Flame Index - 8 Heat Evolved Index - 3 Smoke Developed Index - 6	ASTM E84 19B Class A	CSFM Title 19 1237.1 NFPA 701 Test Methods 1&2 ASTM E84 19B Class A

10 year · HDPE · GREENGUARD · OEKO-TEX® STANDARD 100

The results listed in this brochure are typical averages from independent testing and quality assurance testing and are not to be taken as a minimum specification nor as forming any contract between GALE Pacific and another party. Due to continuous product improvement, refer to the GALE Pacific Commercial Fabrics website for latest technical performance information.
† Please note, Check with your local waste handler to confirm recyclability
‡ Please note, Oeko-Tex & Greenguard applicable to non FR products only
** Please note, due to limitations of the printing process, colors pictured may not represent the true color*

GALE PACIFIC COMMERCIAL FABRICS

Gale Pacific AU
145 Woodlands Drive,
Braeside Victoria 3195
Toll Free: 1 800 331 521

Gale Pacific USA
285 West Central Parkway, Ste. 1704
Altamonte Springs, FL 32714
Toll Free: 1 800 560 4667

Gale Pacific MENA
JAFZA 15, 6th Floor, Room 604,
Jebel Ali Free Zone
Dubai, United Arab Emirates
+971 4 881 7114

Gale Pacific EURASIA
+44 7388 779124

galecommercial.com

CAL FIRE SINCE 1885

FLAME RETARDANT

Fabric Registration

LICENSE NUMBER: F-037801

COMMERCIAL NINETYFIVE 340FR

Product Marketed by:

GALE PACIFIC LTD
145 WOODLANDS DRIVE
BRAESIDE, AUSTRALIA 3195, ,

Issue Date : 04/18/2023
Expiration Date : 06/30/2024

This product meets the minimum requirements of flame resistance established by the California State Fire Marshal for products identified in Section 13115, California Health and Safety Code. The scope of the approved use of this product is provided in the current edition of the CALIFORNIA APPROVED LIST OF FLAME RETARDANT CHEMICALS AND FABRICS, GENERAL AND LIMITED APPLICATIONS CONCERNS published by the California State Fire Marshal.

Issued By Cortney Walker
Fire Engineering License Manager
Fire Engineering & Investigations Division

Reviewed and Approved By Patricia Setter
Deputy State Fire Marshal III
Fire Engineering & Investigations Division

OFFICE OF THE STATE FIRE MARSHAL

Please visit calfire.govmotus.org for more information on Licensing and Permitting with CAL FIRE

Page 1 of 1

TEKS® SELF-DRILLING FASTENERS

Product Report No. 02703

Selector Guide

Part Number	Description	Head Style	Drill Point	Drill & Tap Capacity	Max. Material Attachment	Box Qty	Applications
1088000	12-24 x 7/8"	HWH	#4	.125-.250	.325	5,000	• Metal deck, clips, liner panels or accessories to structural steel or bar joist. • Longer fasteners can be used in retrofit clip and sheet applications.
1414000	12-24 x 1-1/4"	HWH	#4.5	.125-.375	.575	4,000	
1006000	12-24 x 1-1/4"	HWH	#5	.125-.500	.375	4,000	
1070000	12-24 x 1-1/2"	*HWH	#5	.125-.500	.625	2,500	
1071000	12-24 x 1-1/2"	**HWH	#5	.125-.500	.625	2,500	
1072000	12-24 x 2"	HWH	#5	.125-.500	1.125	2,000	
1074000	1/4-28 x 3"	*HWH	#5	.125-.500	2.150	1,000	
1075000	1/4-28 x 4"	*HWH	#5	.125-.500	3.150	500	
1641000	1/4-28 x 5"	HWH	#5	.125-.500	4.150	250	
1431000	1/4-28 x 6"	HWH	#5	.125-.500	5.150	250	
1590000	1/4-28 x 8"	HWH	#5	.125-.500	7.150	150	

All available with bonded washer.
** 5/16" Across Flats HWH ** 3/8" Across Flats HWH*

Performance Data

PULLOUT VALUES (average lbs. ultimate)

Fastener Dia.	Fastener Pt.	Steel Gauge 16	14	12	3/16	1/4
12	4	-	-	1532	3485	3844
	4.5	-	-	1508	3865	4101
	5	-	-	1527	3701	3999
1/4	5	-	-	1507	3300	5059

FASTENER VALUES

Fastener (dia-tpi)	Tensile (lbs. min.)	Shear (avg. lbs. ult.)	Torque (min. in. lbs.)
12-24 T/4	3020	2100	100
12-24 T/4.5	3020	2100	100
12-24 T/5	3020	2100	100
1/4-28 T/5	5577	3310	234

SHEET STEEL GAUGES

Gauge No.	12	14	16	18	20	22	24	26
Decimal Equivalent	.105"	.075"	.060"	.048"	.036"	.030"	.024"	.018"

SHEAR VALUES (average lbs. ultimate)

Fastener Dia.	Fastener Pt.	Steel Gauge (lapped) 16	14	12	1/8	1/4
12	4	-	-	2048	2030	-
	4.5	-	-	2641	2887	2897
	5	-	-	2650	2700	2762
1/4	5	1597	2005	2350	2792	3310

Note: *Teks fasteners are not categorized as structural bolts. Proper design criteria and strengths must be used for satisfactory application.The values listed are ultimate averages achieved under laboratory conditions and apply to Buildex manufactured fasteners only. Appropriate safety factors should be applied to these values for design purposes.*

Installation Guidelines

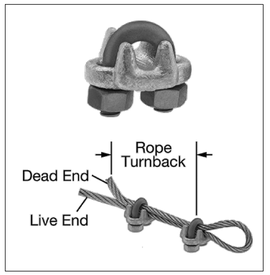
- A standard screwgun with a depth sensitive nosepiece should be used to install Teks. For optimal fastener performance, the screwgun should be a minimum of 6 amps and have an RPM range of 0-2500. (Maximum 1800 RPM is recommended for Teks 5 fasteners)
- Adjust the screwgun nosepiece to properly seat the fastener.
- New magnetic sockets must be correctly set before use. Remove chip build-up as needed.
- The fastener is fully seated when the head is flush with the work surface.
- Overdriving may result in torsional failure of the fastener or stripout of the substrate.
- The fastener must penetrate beyond the metal structure a minimum of 3 pitches of thread.

ITW Buildex

1349 West Bryn Mawr Avenue
Itasca, Illinois 60143
630-595-3500 Fax: 630-595-3549
www.itwbuildex.com

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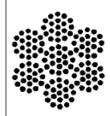
FORGED WIRE ROPE CLAMP

FITTING TYPE: ROPE CLAMP
FABRICATION: FORGED
MATERIAL: GALVANIZED STEEL
FOR WIRE ROPE DIAMETER: 1/4"
NUMBER OF CLAMPS REQUIRED: 2
ROPE TURNBACK: 4 3/4"
FOR WIRE ROPE CONSTRUCTION: 7 × 19
ATTACHMENT TYPE: LOOP
CLAMP
WIDTH: 1 7/16"
HEIGHT: 1 3/8"
THICKNESS: 1 1/4"
REQUIRED INSTALLATION TOOL: TORQUE WRENCH
REQUIRED TORQUE: 15 FT.-LBS.
CAPACITY: 80% OF THE ROPE'S CAPACITY
SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.



7 x 19

7 x 19 Dia. (In)	Approx. Wt 1000 Ft/lbs	Galvanized Min. Breaking Strengths (lbs)
3/32	17.	1,000
1/8	29.	2,000
5/32	45.	2,800
3/16	65.	4,200
7/32	86.	5,600
1/4	110.	7,000
9/32	139.	8,000
5/16	173.	9,800
3/8	243.	14,400

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.

PlayPower
Inspiring the world to play.

CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

CERTIFICATIONS:
IAS CERTIFICATION No: FA-428
CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:
MIRACLE PLAYGROUND SALES

PROJECT NAME:
L.U.C.H.A. ES

LOCATION:
SAN JOSE CA

MODEL NUMBER:
85948

STRUCTURE TYPE:
INTEGRATED HEXAGON DSA

SIZE: MAXIMUM
Ø26' x 12'e

SCALE : NONE

DRAWING SIZE:
D

Eng. By :	MS	04/02/24
Design By :	QD	04/02/24
Approved By :	DT-JC	04/02/24

DRAWING DESCRIPTION:
SPECIFICATIONS

DWG. 85948-1.0

SHEET 26'Ø 2000

REV. NC

REGISTERED PROFESSIONAL ENGINEER
MARK A. BERTOLINI
No. 3693
STRUCTURAL
STATE OF CALIFORNIA
6/28/2024

GENERAL NOTES

1.- THE SHOP WELDING INSPECTION SHALL INCLUDE WELDING OF ALL STEEL MEMBERS AND IDENTIFICATION OF STEEL THROUGH MILL CERTIFICATE OR MATERIAL TESTING, UNCERTIFIED STEEL SHALL BE TESTED TO THE REQUIREMENTS OF CBC 2022 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

2.- FOUNDATION DESIGN BASED ON CBC 2022, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

3.- DESIGN PER FOLLOWING CODES: CBC 2022 (CHAPTER 35), ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-19, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL
1.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY USA SHADE & FABRIC STRUCTURES. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2022 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY USA SHADE & FABRIC STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2022 EDITION, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

4.- ALL GALVANIZED STEEL TUBE PRODUCTS MANUFACTURED BY ALLIED TUBE & CONDUIT FOR THIS STRUCTURE SHALL BE, AND CONFORM TO ASTM A500 GRADE C, IN ITS' ENTIRETY.
TYPICAL MECHANICAL PROPERTIES ARE:
ROUND TUBE GRADE C 50,000 PSI YIELD STRESS MINIMUM / 62,000 PSI TENSILE STRESS MINIMUM

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE C, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:
ROUND HSS 50,000 PSI YIELD STRESS / 62,000 PSI TENSILE STRESS

6.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

7.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

8.- ALL WELDING TO CONFORM WITH AMERICAN WELDING SOCIETY STANDARDS AND SHALL BE INSPECTED BY AN AWS/CWI INSPECTOR. AWS D1.1 FOR HOT ROLLED. AWS D1.3 FOR SHEET/COLD FORMED. AWS D1.8 SEISMIC SUPPLEMENT.

9.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

10.- SHOP CONNECTIONS SHALL BE WELDED UNLESS NOTED OTHERWISE, ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" ER70SX ELECTRODES UNLESS OTHERWISE NOTED. GMAW IS ACCEPTABLE.

11.- ALL STEEL BOLTS SHALL COMPLY WITH ASTM A307 (GALVANIZED) GRADE A, TENSILE STRENGTH= 60 KSI, ELONGATION % = 18. ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ASTM A307 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS. BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION (ST).

12.- ALL STRUCTURAL STEEL (ITEMS FROM NOTE 5) SHALL BE POWDER COATED WITH ONE SHOP COAT (2.5 MILS MIN.) OF ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT, OR EQUIVALENT PAINT SYSTEM. THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS, ASKO NOBEL, PPG OR TIGER DRYLAC). TO ACHIEVE OPTIMUM ADHESION, IT IS RECOMMENDED THAT THE PROPER TREATMENT AND DRYING TAKE PLACE BEFORE COATING. POLYESTER POWDER (TGIC) SPECIFICATIONS SHALL BE AS FOLLOWS:
- PENCIL HARDNESS (ASTM D-3363). - HUMIDITY (ASTM D-2247).
- SOLVENT RESISTANCE (PCI METHOD) - 50 DBL RUBS SL. SOFTNESS.

13.- ALL STEEL ROUND TUBING (ITEMS FROM NOTE 4) SHALL BE TRIPLE COATED FOR RUST PROTECTION USING THE IN-LINE ELECTROPLATING COAT PROCESS. TUBING SHALL BE INTERNALLY COATED WITH ZINC AND ORGANIC COATINGS TO PREVENT CORROSION AS MANUFACTURED BY ALLIED TUBE & CONDUIT.

14.- ALL EXPOSED STEEL FASTENERS SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329) AS APPLICABLE, OR PROTECTED WITH CORROSION PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT.

CONCRETE SPECIFICATION
1.- CONCRETE SHALL BE SAMPLED AND TESTED PER CBC 2022 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'c= 4500 PSI, TYPE V CEMENT PLUS POZZOLAN OR SLAG CEMENT, MAXIMUM WATER/CEMENT RATIO OF 0.45, PER ACI 318-19 CHAPTER 19. (NO ADMIXTURES CONTAINING CALCIUM CHLORIDE WILL BE USED.) REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 AND TO BE Fy= 60000 PSI , MIN. GR. 60. ALSO COATED ACCORDING TO ASTM A767/ A767M, STANDARD SPECIFICATION FOR ZINC-COATING (GALVANIZED) STEEL BARS FOR CONCRETE REINFORCEMENT.

3.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

4.- ALL NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH OF 5000 PSI, AND SHALL COMPLY THE REQUIREMENTS OF ASTM C109, ASTM C939, ASTM C1090, ASTM C1107, WHEN APPLICABLE.

FABRIC SPECIFICATION
1.- FABRIC SHALL BE MANUFACTURED BY GALE PACIFIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS. MINIMUM SEAM LENGTH 3/4".

2.- THE FABRIC SHALL RETAIN 80% OF ITS TENSILE AND TEARING STRENGTH AFTER ULTRAVIOLET EXPOSURE PER ASTM G53 USING A 313 NM LIGHT SOURCE FOR 500 HOURS WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS.

3.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHAL TO SCHOOL'S DISTRICT INSPECTOR OF RECORD AT SITE SPECIFIC INSTALLATION. COPY OF FIRE CERTIFICATION SHALL BE SENT TO DSA.

4.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE BY THE DISTRICT. FIRE TEST ON FABRIC: NFPA 701 TEST 1 & 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST. FLAME SPREAD INDEX (FSI): 8. SMOKE DEVELOPED INDEX (SDI): 6. FABRIC IS ACCEPTABLE FOR USE IN WILDLIFE URBAN INTERFACE AREA.

5.- FABRIC TOP NEEDS TO BE REMOVED IF SNOW EXCEEDING 5 PSF ARE ANTICIPATED, FABRIC TOP NEEDS TO BE REMOVED IF WINDS EXCEEDING 115 MPH ARE ANTICIPATED.

6.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. USA SHADE & FABRIC STRUCTURES SHALL BE NOTIFIED IF SIGNIFICANT DAMAGE IS PRESENT BEFORE RE-INSTALLATION.

AIRCRAFT CABLE

1.- FOR FABRIC ATTACHMENT USE 1/4" 7x19 GALV. CABLE PER ASTM A1023/A1023M WITH A BREAKING STRENGTH VALUE OF 7,000 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM AND 350 LBS MAXIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS Sa=2386 LB.

2.- CABLES SHALL BE FED THROUGH THE FABRIC SLEEVES AROUND THE PERIMETER OF THE CANOPY AND TENSIONED UNTIL THE FABRIC PANELS (DESIGNED PURPOSELY UNDERSIZED) REACH A TAUT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTING VISITS AS REQUIRED.

CODE ANALYSIS

BUILDING	OCCUPANCY	CONSTRUCTION TYPE	AREA (SQF)	OCCUPANT LOAD
SHADE STRUCTURE Ø12'-0"	E	V-B	94	N/A

CBC PC DESIGN NOTES

BUILDING CODE	CBC 2022 (BASED ON IBC 2021)
FLOOR LIVE LOAD	N/A
ROOF LIVE LOAD	RLL 5 PSF

ALLOWABLE SOIL PRESSURE:

DL + LL (CONC FTG)	1500 PSF
DL + LL + SEISMIC (CONC FTG)	1500 PSF
LATERAL BEARING DESIGN VALUE	100 PSF/FT BELOW NATURAL GRADE, PER TABLE 1806A.2

PER CBC SECTION 1806A.3.4.
ALLOWABLE PIER FRICTIONAL RESISTANCE 250 PSF MAXIMUM
BASED ON SECTION 1810A.3.3.1.4 (ONE-SIXTH OF THE BEARING VALUE).
UPLIFT FRICTIONAL RESISTANCE HAVE A SAFETY FACTOR OF 3.

ROOF SNOW LOAD	5 PSF
ICE LOAD	ZERO PSF
FLOOD HAZARD AREA	ZONE X

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2
NOTE: WIND DESIGN IS LIMITED TO UNOBSTRUCTED CLEAR FLOW CONDITION

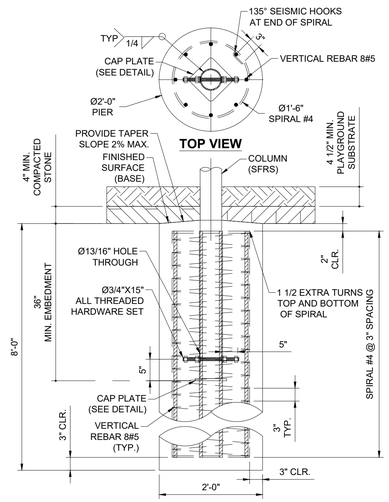
-BASIC DESIGN WIND SPEED (3 SEC GUST)	V	92 MPH
-ASD WIND LOAD (CBC 2022 SEC. 1603A.1.4)	V_{ASD}	71 MPH
-WIND EXPOSURE FACTOR	C	
-TOPOGRAPHIC FACTOR	Kzt	1
-RISK CATEGORY	II	
-VELOCITY PRESSURE EXPOSURE COEFFICIENT	Kz	0.85
-VELOCITY PRESSURE	qz	15.66 PSF

SEISMIC DESIGN:

-SITE CLASS		D
	SS	1.639g
	S1	0.619g
-SPECTRAL RESPONSE COEFFICIENTS	SDS	1.092
	SD1	0.702

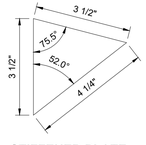
-LATERAL FORCE RESISTING SYSTEM G.2 ORDINARY CANTILEVERED COLUMN SYSTEM.

-SEISMIC IMPORTANCE FACTOR	Ie	1.00
-DESIGN BASE SHEAR AT BASE	V	391 LB
-SEISMIC RESPONSE COEFFICIENTS	Cs	0.87
-RESPONSE MODIFICATION FACTOR	R	1.25
(ORDINARY CANTILEVER COLUMN SYSTEM)		
-ANALYSIS PROCEDURE		EQUIVALENT LATERAL FORCE
-RISK CATEGORY		II
-SEISMIC DESIGN CATEGORY		D
-SITE COEFFICIENT CATEGORY	Fa	1.0
-REDUNDANCY FACTOR	ρ	1.3

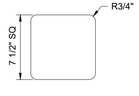


TOP VIEW

DRILLED PIER FOOTING-PIH
(EMBEDDED, PIH)
(USE FOR NON-CONSTRAINED CASES)



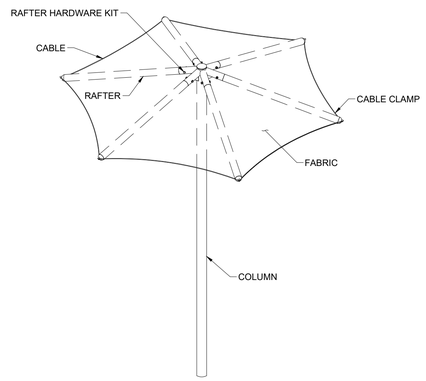
STIFFENER PLATE
REFER TO VIEW B-B
3/8" THK.
(A572 GR.50)



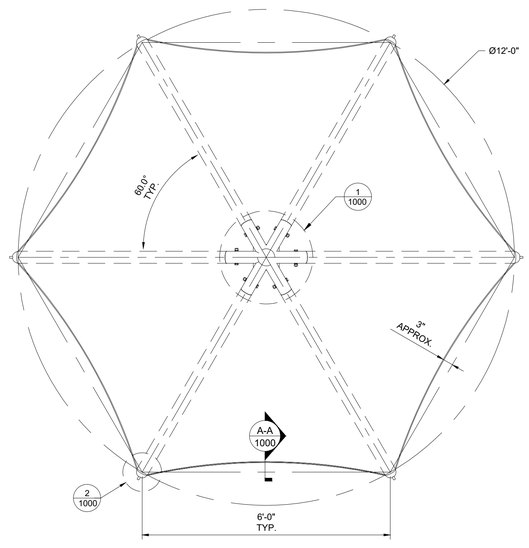
CAP PLATE
(3/8" THK)
(BOTTOM OF PIH COLUMNS)
(A572 GR. 50)



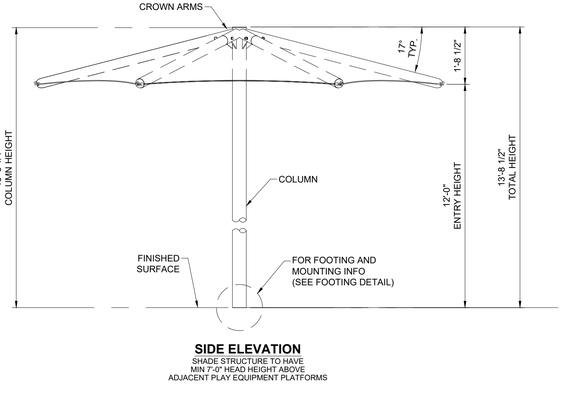
TOP CAP PLATE
(1/4" THK)
(TOP OF PIH COLUMNS)
(A572 GR. 50)



ISOMETRIC VIEW



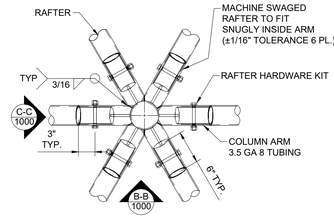
TOP VIEW



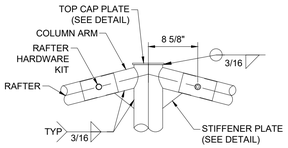
SIDE ELEVATION
SHADE STRUCTURE TO HAVE
MIN 7'-0" HEAD HEIGHT ABOVE
ADJACENT PLAY EQUIPMENT PLATFORMS

LIST OF MATERIALS

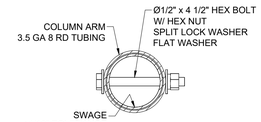
DESCRIPTION	MATERIAL
COLUMN	HSS 5.0" X 0.375"
RAFTER	3.5 GA 8 RD TUBING (CHS 3.5" X 0.165")
FABRIC	COMMERCIAL 95-340FR
50 FT OF Ø1/4" STEEL CABLE	GALVANIZED STEEL
Ø1/4" CABLE CLAMP	GALVANIZED STEEL
Ø1/2"-13NC x 4.5" HEX BOLT	ASTM A307 GRADE A GALVANIZED
Ø1/2"-13NC HEX NUT	ASTM A563DH GALVANIZED
Ø1/2" SPLIT LOCK WASHER	ASTM F2329M-2015 ZINC COATED
Ø1/2" FLAT WASHER	ASTM F436 GALVANIZED
Ø 3/4"-10NC x 15" ALL THREADED ROD	ASTM A449 GALVANIZED
Ø3/4"-10NC HEX NUT, DH WAXED	ASTM A563DH GALVANIZED
Ø3/4" FLAT WASHER	ASTM F436 GALVANIZED



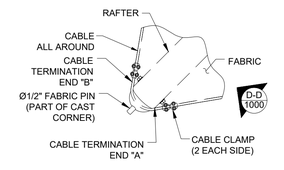
DETAIL 1
REFER TO TOP VIEW



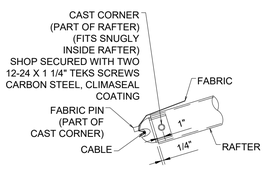
VIEW B-B
REFER TO DETAIL 1



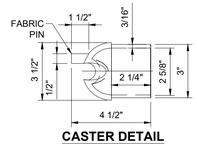
SECTION C-C
REFER TO DETAIL 1



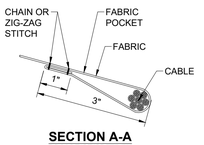
DETAIL 2
REFER TO TOP VIEW



VIEW D-D
REFER TO DETAIL 2



CASTER DETAIL
(APPLIES TO ALL RAFTERS)
ASTM B26 ANSI 356
REFER TO VIEW D-D



SECTION A-A
REFER TO TOP VIEW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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PlayPower
Inspiring the world to play.
CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

CERTIFICATIONS:
IAS CERTIFICATION No: FA-428
CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:
MIRACLE PLAYGROUND SALES
PROJECT NAME:
L.U.C.H.A. ES
LOCATION:
SAN JOSE CA
PROJECT NUMBER:
85948

STRUCTURE TYPE:
INTEGRATED SINGLE POST HEX DSA
SIZE: MAXIMUM
Ø12' X 12'e
SCALE : NONE
DRAWING SIZE:
D

Eng. By :	JC	04/02/24
Design By :	RM	04/02/24
Approved By :	DT	04/02/24

DRAWING DESCRIPTION:
PRODUCT INFORMATION

DWG.
85948-2.0
SHEET
12'x12' 1000
REV.
NC

REGISTERED PROFESSIONAL ENGINEER
MARK ALBERT WAGNER
No. 3693
STRUCTURAL
STATE OF CALIFORNIA
6/28/2024

Commercial
NinetyFive 340FR

PRODUCT PROFILE



Commercial NinetyFive 340 FR, the flame retardant version of the most trusted HDPE shade fabric in the industry, is a mid-weight, flame retardant fabric that delivers the utmost in versatility. Available in 22 vibrant and on-trend colors, Commercial NinetyFive 340 FR can fulfill almost any HDPE design requirement.

- A mid-weight, 340 gsm fabric suitable for applications spanning a wide array of sizes and designs.
- Provides the optimal combination of sun protection, strength, and durability to ensure low maintenance, and long-life performance
- The most expansive color assortment in the HDPE shade fabric market. Offering 22 rich, vibrant and on-trend colors to fulfill a wide range of design requirements.
- Each color individually tested and meets the most stringent FR certification criteria
- Industry-leading stentering process provides premium lay flat characteristics to assist with accurate design and fabrication
- Backed by a full 10-year warranty against UV degradation and designed to withstand the world's harshest environments
- 100% Lead and Phthalate free

FLAMMABILITY

CSFM Title 19 1237.1
NFPA 701 Test Methods 1 & 2
ASTM E84 19B

Each color individually tested and passes all certification criteria for above. Test results available upon request.
NFP92-503 Class M1 in process

FABRIC PROPERTIES

AS 2001.2.13 Mass per unit
Nominal fabric mass 340 gsm ± 20; ;10 oz/yd²
Approximate thickness 0.06 in. / 1.6 mm

ROLL SPECIFICATIONS

Nominal width:	9 ft. 10 in. / 3.0m (folded)
Length:	131 ft 3 in. / 40m
Approx. roll weight:	97 lbs. / 44 kg
Approx. roll diameter:	1.05 ft / 0.32 m
Core diameter:	1.38 in. / 35 mm

USAGE INSTRUCTIONS

Do not use against flames. Contact with organic solvents, halogens or highly acidic substances may reduce the service life of the fabric and void the warranty. Biaxial elastic material properties available on request.

SUGGESTED SPECIFICATION

Shade cloth fabric shall be compliant to Australian standard AS 4174:2018 and shall be GALE Pacific Commercial NinetyFive 340 FR Knitted HDPE monofilament & tape shade fabric offering a UVE Protection from 90 to 96%.

PERFORMANCE

ASTM D5034
Tensile Strength and Elongation

Maximum Force – Warp (Mean)	158.6 lbf
Elongation at Maximum Force (Mean)	89%
Maximum Force – Weft (Mean)	412.3 lbf
Elongation at Maximum Force – Warp (Mean)	49%

ASTM D2261
Tearing Strength – Tongue (Single Rip)

Mean Force – Warp	43.0 lbf
Mean Force – Weft	39.6 lbf

ASTM D6797
Bursting Strength – Ball Burst (Constant Rate of Extension)

Mean Force	408 lbf

AS 4174:2018
Shade Protection Fabric Performance

Colour	Cover Factor	Shade Factor	UV-Vis Trans %	UVR Trans %	UVR Block %	UVE %	Protection Category
Aquatic Blue	92	88.1	11.9	8.5	91.5	91	Very Effective
Black	95	94.8	5.2	5.0	95.0	94	Very Effective
Bright Green	90	87.3	12.7	9.0	91.0	90	Effective
Brown	96	94.3	5.7	4.0	96.0	96	Most Effective
Brunswick Green	93	92.9	7.1	6.4	93.6	92	Very Effective
Cayenne	93	87.3	12.7	6.7	93.3	92	Very Effective
Cedar	93	88.4	11.6	6.4	93.6	93	Very Effective
Charcoal	93	93.6	6.4	6.1	93.9	92	Very Effective
Cherry Red	90	80.0	20.0	10.0	90.0	90	Effective
Deep Ochre	91	90.5	9.5	8.3	91.7	90	Effective
Desert Sand	93	86.1	13.9	6.6	93.4	92	Very Effective
Gun Metal	96	94.5	5.5	3.5	96.5	96	Most Effective
Natural	94	78.3	21.7	6.5	93.5	92	Very Effective
Navy Blue	94	93.1	6.9	6.2	93.8	93	Very Effective
Orange	92	80.8	19.2	7.6	92.4	91	Very Effective
Rivergum Green	94	89.7	10.3	6.0	94.0	93	Very Effective
Royal Purple	91	87.9	12.1	8.6	91.4	90	Effective
Sky Blue	94	91.3	8.7	6.0	94.0	93	Very Effective
Steel Grey	92	89.7	10.3	7.6	92.4	91	Very Effective
Turquoise	94	89.5	10.5	6.6	93.4	93	Very Effective
White	95	76.5	23.5	5.4	94.6	94	Very Effective
Yellow	93	77.5	22.5	6.8	93.2	92	Very Effective

Industrial Fabrics Association International | American Society of Landscape Architects | Greenguard Certified to Textiles

USA	P 1800 560 4667	F +1 407 772 0553
AU	P 1800 331 521	F +61 3 9518 3398
NZ	P 0800 555 171	F 0800 555 172
UAE	P +971 4 881 7114	F +971 4 881 7167

www.galecommercial.com

GALE PACIFIC

Rev:1-US 3/20

The above results are typical averages from quality assurance testing and are not to be taken as a minimum specification nor as forming any contract between GALE Pacific and another party. Due to continuous product improvement product specifications are subject to alteration without notice. As the use and disposal of this product are beyond GALE Pacific's control, regardless of any assistance provided without charge, GALE Pacific assumes no obligation or liability for the suitability of its products in any specific end use application. It is the customer's responsibility to determine whether GALE Pacific's products are appropriate for the specific application and complies with any legal & patent regulations.

AS Standards / ASTM Standards

	AS Standards: Commercial 9S 340	AS Standards: Commercial 9S 340 FR	ASTM Standards: Commercial 9S 340	ASTM Standards: Commercial 9S 340 FR
Performance				
Maximum force	warp 670 N/50mm	580 N/50mm	warp 189.1 lbf	158.6 lbf
Elongation at max. force	warp 117%	98%	warp 103.67%	88.7%
Maximum force	weft 2400 N/50mm	2000 N/50mm	weft 462.5 lbf	412.5 lbf
Elongation at max. force	weft 83%	71.5%	weft 63%	49%
Breaking force	warp 990 N	930 N		
Breaking force	weft 2000 N	2000 N		
Tear strength	warp 184 N	194 N	warp 52.2 lbf	43 lbf
Tear strength	weft 347 N	282 N	weft 52.2 lbf	39.6 lbf
Bursting pressure	3500 kPa	3600 kPa		
Bursting force	1937 N	1944 N	422 lbf	408 lbf
Fabric Properties				
Nominal Fabric Mass	340 gsm ± 20	340 gsm ± 20	340 gsm ± 20	340 gsm ± 20
Roll Specification				
Width	3m (folded)	3m (folded)	9 ft. 10 in. (folded)	9 ft. 10 in. (folded)
Length	40m	40m	131 ft. 3 in.	131 ft. 3 in.
Flammability Info	Flammability Index - 12 Ignitability Index - 10 Spread of Flame Index - 7 Heat Evolved Index - 5 Smoke Developed Index - 4	Flammability Index - 1 Ignitability Index - 13 Spread of Flame Index - 8 Heat Evolved Index - 3 Smoke Developed Index - 6	ASTM E84 19B Class A	CSFM Title 19 1237.1 NFPA 701 Test Methods 1&2 ASTM E84 19B Class A

10 year | HDPE | GREENGUARD | OEKO-TEX® STANDARD 100

*The results listed in this brochure are typical averages from independent testing and quality assurance testing and are not to be taken as a minimum specification nor as forming any contract between GALE Pacific and another party. Due to continuous product improvement, refer to the GALE Pacific Commercial Fabrics website for latest technical performance information.
† Please note, Check with your local waste handler to confirm recyclability
‡ Please note, Oeko-Tex & Greenguard applicable to non FR products only
* Please note, due to limitations of the printing process, colors pictured may not represent the true color

GALE PACIFIC COMMERCIAL FABRICS

Gale Pacific AU
145 Woodlands Drive,
Braeside Victoria 3195
Toll Free: 1 800 331 521

Gale Pacific USA
285 West Central Parkway, Ste. 1704
Altamonte Springs, FL 32714
Toll Free: 1 800 560 4667

Gale Pacific MENA
JAFZA 15, 6th Floor, Room 604,
Jebel Ali Free Zone
Dubai, United Arab Emirates
+971 4 881 7114

Gale Pacific EURASIA
+44 7388 779124

galecommercial.com

CAL FIRE SINCE 1885

FLAME RETARDANT

Fabric Registration

LICENSE NUMBER: F-037801

COMMERCIAL NINETYFIVE 340FR

Product Marketed by:

GALE PACIFIC LTD
145 WOODLANDS DRIVE
BRAESIDE, AUSTRAILIA 3195, ,

Issue Date : 04/18/2023
Expiration Date : 06/30/2024

This product meets the minimum requirements of flame resistance established by the California State Fire Marshal for products identified in Section 13115, California Health and Safety Code. The scope of the approved use of this product is provided in the current edition of the CALIFORNIA APPROVED LIST OF FLAME RETARDANT CHEMICALS AND FABRICS, GENERAL AND LIMITED APPLICATIONS CONCERNS published by the California State Fire Marshal.

Issued By Cortney Walker
Fire Engineering License Manager
Fire Engineering & Investigations Division

Reviewed and Approved By Patricia Setter
Deputy State Fire Marshal III
Fire Engineering & Investigations Division

OFFICE OF THE STATE FIRE MARSHAL

Please visit calfire.govmotus.org for more information on Licensing and Permitting with CAL FIRE

Page 1 of 1

TEKS® SELF-DRILLING FASTENERS — Product Report No. 02703

Selector Guide



Part Number	Description	Head Style	Drill Point	Drill & Tap Capacity	Max. Material Attachment	Box Qty	Applications
1088000	12-24 x 7/8"	HWH	#4	.125-.250	.325	5,000	• Metal deck, clips, liner panels or accessories to structural steel or bar joist. • Longer fasteners can be used in retrofit clip and sheet applications.
1414000	12-24 x 1-1/4"	HWH	#4.5	.125-.375	.575	4,000	
1006000	12-24 x 1-1/4"	HWH	#5	.125-.500	.375	4,000	
1070000	12-24 x 1-1/2"	*HWH	#5	.125-.500	.625	2,500	
1071000	12-24 x 1-1/2"	**HWH	#5	.125-.500	.625	2,500	
1072000	12-24 x 2"	HWH	#5	.125-.500	1.125	2,000	
1074000	1/4-28 x 3"	*HWH	#5	.125-.500	2.150	1,000	
1075000	1/4-28 x 4"	*HWH	#5	.125-.500	3.150	500	
1641000	1/4-28 x 5"	HWH	#5	.125-.500	4.150	250	
1431000	1/4-28 x 6"	HWH	#5	.125-.500	5.150	250	
1590000	1/4-28 x 8"	HWH	#5	.125-.500	7.150	150	

All available with bonded washer.
*5/16" Across Flats HWH **3/8" Across Flats HWH

Performance Data

PULLOUT VALUES (average lbs. ultimate)

Fastener Dia.	Fastener Pt.	Steel Gauge 16	14	12	3/16	1/4
12	4	-	-	1532	3485	3844
	4.5	-	-	1508	3865	4101
	5	-	-	1527	3701	3999
1/4	5	-	-	1507	3300	5059

FASTENER VALUES

Fastener (dia-tpi)	Tensile (lbs. min.)	Shear (avg. lbs. ult.)	Torque (min. in. lbs.)
12-24 T/4	3020	2100	100
12-24 T/4.5	3020	2100	100
12-24 T/5	3020	2100	100
1/4-28 T/5	5577	3310	234

SHEET STEEL GAUGES

Gauge No.	12	14	16	18	20	22	24	26
Decimal Equivalent	.105"	.075"	.060"	.048"	.036"	.030"	.024"	.018"

SHEAR VALUES (average lbs. ultimate)

Fastener Dia.	Fastener Pt.	Steel Gauge (lapped) 16	14	12	1/8	1/4
12	4	-	-	2048	2030	-
	4.5	-	-	2641	2887	2897
	5	-	-	2650	2700	2762
1/4	5	1597	2005	2350	2792	3310

Note: Teks fasteners are not categorized as structural bolts. Proper design criteria and strengths must be used for satisfactory application.The values listed are ultimate averages achieved under laboratory conditions and apply to Buildex manufactured fasteners only. Appropriate safety factors should be applied to these values for design purposes.

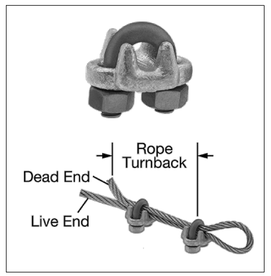
Installation Guidelines

- A standard screwgun with a depth sensitive nosepiece should be used to install Teks. For optimal fastener performance, the screwgun should be a minimum of 6 amps and have an RPM range of 0-2500. (Maximum 1800 RPM is recommended for Teks 5 fasteners)
- Adjust the screwgun nosepiece to properly seat the fastener.
- New magnetic sockets must be correctly set before use. Remove chip build-up as needed.
- The fastener is fully seated when the head is flush with the work surface.
- Overdriving may result in torsional failure of the fastener or stripout of the substrate.
- The fastener must penetrate beyond the metal structure a minimum of 3 pitches of thread.

ITW Buildex
1349 West Bryn Mawr Avenue
Itasca, Illinois 60143
630-595-3500 Fax: 630-595-3549
www.itwbuildex.com

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10



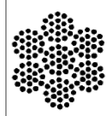
FORGED WIRE ROPE CLAMP

FITTING TYPE: ROPE CLAMP
FABRICATION: FORGED
MATERIAL: GALVANIZED STEEL
FOR WIRE ROPE DIAMETER: 1/4"
NUMBER OF CLAMPS REQUIRED: 2
ROPE TURNBACK: 4 3/4"
FOR WIRE ROPE CONSTRUCTION: 7 × 19
ATTACHMENT TYPE: LOOP
CLAMP
WIDTH: 1 7/16"
HEIGHT: 1 3/8"
THICKNESS: 1 1/4"
REQUIRED INSTALLATION TOOL: TORQUE WRENCH
REQUIRED TORQUE: 15 FT.-LBS.
CAPACITY: 80% OF THE ROPE'S CAPACITY
SPECIFICATIONS MET ASME B30.26, FED. SPEC. FF-C-450

Aircraft Cable

Preformed, made in accordance with commercial specifications military and federal specification rope available.

Carbon Steel (Aircraft Cable) - Galvanized cable has the highest strength and greatest fatigue life of the materials offered. It has good to fair corrosion resistance in rural to industrial atmosphere environments. This material is most widely used for small diameter cables. Tin over galvanized cable offers greater corrosion resistance and reduced friction over pulleys.



7 x 19

7 x 19 Dia. (In)	Approx. Wt 1000 Ft/lbs	Galvanized Min. Breaking Strengths (lbs)
3/32	17.	1,000
1/8	29.	2,000
5/32	45.	2,800
3/16	65.	4,200
7/32	86.	5,600
1/4	110.	7,000
9/32	139.	8,000
5/16	173.	9,800
3/8	243.	14,400

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

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CORPORATE HEADQUARTERS
2580 ESTERS BLVD. SUITE 100
DFW AIRPORT, TX, 75261
800-966-5005

CERTIFICATIONS:
IAS CERTIFICATION No: FA-428
CLARK COUNTY MANUFACTURER CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:
MIRACLE PLAYGROUND SALES

PROJECT NAME:
L.U.C.H.A. ES

LOCATION:
SAN JOSE CA

PROJECT NUMBER:
85948

STRUCTURE TYPE:
INTEGRATED SINGLE POST HEX DSA

SIZE: MAXIMUM
Ø12' X 12'e

SCALE : NONE

DRAWING SIZE:
D

Eng. By :	JC	04/02/24
Design By :	RM	04/02/24
Approved By :	DT	04/02/24

DRAWING DESCRIPTION:
SPECIFICATIONS

DWG.
85948-2.0

SHEET
12'x12' 2000

REV.
NC

REGISTERED PROFESSIONAL ENGINEER
MARK LIBERMAN
No. 3693
STRUCTURAL
STATE OF CALIFORNIA
6/28/2024

PROJECT DIRECTORY

OWNER
CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670
T: (562) 464-4766
F: (562) 464-4770
CONTACT: STEVE GRAAF

ARCHITECT
RON EDWARDS ARCHITECT
7400 PEDRICK CT
BAKERSFIELD, CA 93313
T: (661) 394-0053
CONTACT: RON EDWARDS

STRUCTURAL
JAMES L. MITCHELL
220 CHERRY LAUREL LANE
KYLE, TX 78640
T: (936) 446-9999

PRECHECK FABRIC SHADE STRUCTURE II

FOR
CUSTOM CANOPIES

SHT	SHEET INDEX	
	ARCHITECTURAL:	
T001	TITLE SHEET & CAL-FIRE MATERIAL CERT.	
T002	T&I GUIDELINE	2 SHEETS
	STRUCTURAL:	
S1.1	GENERAL NOTES & TYPICAL DETAILS	
S1.2	GENERAL NOTES & TYPICAL DETAILS	
S1.3	GENERAL NOTES & TYPICAL DETAILS	
HC2020-1	20'X20'X12' HIP CANOPY DRAWINGS	
HC2020-2	20'X20'X12' HIP CANOPY DRAWINGS	
HC2020-3	20'X20'X12' HIP CANOPY DRAWINGS	
~~HC3030-1~~	~~30'X30'X12' HIP CANOPY DRAWINGS~~	
~~HC3030-2~~	~~30'X30'X12' HIP CANOPY DRAWINGS~~	
~~HC3030-3~~	~~30'X30'X12' HIP CANOPY DRAWINGS~~	
~~HC4030-1~~	~~40'X30'X12' HIP CANOPY DRAWINGS~~	
~~HC4030-2~~	~~40'X30'X12' HIP CANOPY DRAWINGS~~	
~~HC4030-3~~	~~40'X30'X12' HIP CANOPY DRAWINGS~~	
~~HS3030-1~~	~~30'X30'X14'/16' HYPAR SHADE DRAWINGS~~	
~~HS3030-2~~	~~30'X30'X14'/16' HYPAR SHADE DRAWINGS~~	
~~HS3030-3~~	~~30'X30'X14'/16' HYPAR SHADE DRAWINGS~~	
~~TS3030-1~~	~~30'X30'X14'/16' TRIANGULAR SHADE DRAWINGS~~	
~~TS3030-2~~	~~30'X30'X14'/16' TRIANGULAR SHADE DRAWINGS~~	
~~TS3030-3~~	~~30'X30'X14'/16' TRIANGULAR SHADE DRAWINGS~~	6 SHEETS
TOTAL		8 SHEETS

MATERIAL SPECIFICATIONS - SEE ALSO SHEETS S1.1 & S1.2

1. MATERIAL WIRE ROPE CLIPS
   - 1.A. CABLE CLIPS SHALL BE FORGED STEEL PER FEDERAL INSPECTION FF-C-40 TYPE 1, CLASS 2 INSTALLED WITH THE U-BOLT ON THE CABLE DEAD END
   - 1.B. BOLT TORQUE FOR $\frac{1}{4}$"Ø CALBE CLIPS = 15 lb-ft, FOR $\frac{5}{16}$"Ø CABLE CLIPS = 30 lb-ft.
2. BOLT HOLES
   - 2.A. BOLT HOLE DIAMETERS SHALL BE $\frac{1}{8}$" MAX. LARGER THAN THE BOLT DIAMETER.
   - 2.B. ALL BOLTS SHALL BE INSTALLED WITH LOCK WASHERS.
3. CORROSION PROTECTION
   - 3.A. STEEL TUBE ROOF MEMBER SHALL BE TRIPLE COATED USING IN-LINE ZINC ELECTROPLATING PER ASTM E-6 AND THEN POWDER COATED WITH A TGIC POLYESTER TOP COAT.
   - 3.B. STEEL PIPE COLUMNS SHALL BE POWDER COATED WITH A TGIC POLYESTER PRIMER AND TOP COAT.
   - 3.C. ZINC SPELTER CONFORMS TO ASTM B-6 HIGH GRADE ZINC.
4. FABRIC MATERIAL
   - 4.A. FABRIC MATERIAL SHALL BE EXTRA BLOCK.
   - 4.B. THE FABRIC SHALL BE MANUFACTURED FROM HIGH DENSITY POLYETHYLENE POLYMER.
   - 4.C. MIN. WEIGHT - 8.3 oz/sq.yd
     FABRIC THICKNESS - 50.4 mil.
   - 4.D. MIN. BREAKING STRENGTH PER ASTM D 5034: WARP = 165 lbs., WEFT = 260 lbs.
   - 4.E. MAX. ELONGATION WARP = 115%, WEFT = 76%.
   - 4.F. MIN. TEAR STRENGTH PER ASTM D 2261: WARP = 26 lbs., WEFT = 26 lbs
   - 4.G. FIRE RETARDANT RATING PER CSFM - TITLE 19, (REGISTRATION #: ALNET EXTRA BLOCK SHADECLOTH - F94501)
   - 4.H. THE FABRIC SHALL BE CAPABLE OF MAINTAINING 80% OF IT'S TENSILE AND TEARING STRENGTH AFTER EXPOSURE TO A 313NM LIGHT SOURCE APPLIED FOR 500 HOURS AND WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS PER ASTM G53. THE FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE.
   - 4.I. THE FABRIC SHALL MAINTAIN AT LEAST 50% OF IT'S ORIGINAL BREAKING STRENGTH AFTER 5 YEARS OF EXPOSURE TO SUNLIGHT.
5. STANDARD NOTES
   - 5.A. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATION (CCR)
   - 5.B. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24 (CCR)
   - 5.C. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE (CCR). MINIMUM CLASS 2 PROJECT INSPECTOR FOR THE PROJECT.
   - 5.D. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.
   - 5.E. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE TITLE24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA.
   - 5.F. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND REQUIREMENTS AND ENVIROMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

APPLICABLE CODES

2022 California Administrative Code (CAC), Part 1, Title 24 CCR2022 California Building Code (CBC), Part 2, Title 24 CCR 2022 California Electrical Code (CEC), Part 3, Title 24 CCR
2022 California Mechanical Code (CMC), Part 4, Title 24 CCR2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
2022 California Energy Code, Part 6, Title 24 CCR 2022 California Fire Code (CFC), Part 9, Title 24 CCR
2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR
2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2022 California Referenced Standards Code, Part 12, Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations

APPLICABLE STANDARDS
For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.

GENERAL NOTES

1. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CFC CHAPTER 33 AND CBC CHAPTER 33.

FLAME RETARDANT

Fabric Registration

LICENSE NUMBER: F-094501

EXTRA BLOCK SHADECLOTH

Product Marketed by:

ALNET PTY (LTD)
MOORSOM AVENUE, EPPING, INDUSTRY II
CAPE TOWN, S. AFRICA, ,

Issue Date : 03/06/2023
Expiration Date : 06/30/2024

This product meets the minimum requirements of flame resistance established by the California State Fire Marshal for products identified in Section 13115, California Health and Safety Code. The scope of the approved use of this product is provided in the current edition of the CALIFORNIA APPROVED LIST OF FLAME RETARDANT CHEMICALS AND FABRICS, GENERAL AND LIMITED APPLICATIONS CONCERNS published by the California State Fire Marshal.

Issued By Cortney Walker
Fire Engineering License Manager
Fire Engineering & Investigations Division

Reviewed and Approved By Patricia Setter
Deputy State Fire Marshal III
Fire Engineering & Investigations Division

OFFICE OF THE STATE FIRE MARSHAL

Please visit calfire.govmotus.org for more information on Licensing and Permitting with CAL FIRE

Page 1 of 1

DESIGN PARAMETER CHECKLIST FOR OTC REVIEW

THE FOLLOWING CHECKLIST IS INTENDED TO ASSIST THE PLAN REVIEWER TO DETERMINE IF THIS PRE-CHECKED SUBMITTAL IS APPLICABLE TO THE SITE SPECIFIC CONDITIONS IN WHICH IT IS INTENDED TO BE USED. IT IS THE SITE APPROVAL ARCHITECT'S RESPONSIBILITY TO FILL IN THE APPROPRIATE BOXES AND CONFIRM SITE CONDITIONS. IF THIS CHECKLIST CANNOT BE COMPLETED, ADDITIONAL ENGINEERING PROVING SITE-SPECIFIC COMPLIANCE IS REQUIRED.

THIS PRE-CHECKED SUBMITTAL IS APPLICABLE UNDER THE FOLLOWING CIRCUMSTANCES:

- [x] NONE OF THE STRUCTURAL DESIGN CRITERIA ARE EXCEEDED
- [x] THE RISK CATEGORY IS 'II' OR LESS
- [x] THE WIND EXPOSURE CATEGORY IS 'C'
- [x] THE PROJECT SITE BASIC ULTIMATE WIND SPEED IS <100mph
- [x] THE PROJECT SITE CLASS CATEGORY IS 'D'
- [ ] THE PROJECT SEISMIC DESIGN CATEGORY IS 'E'
- [x] THE PROJECT SEISMIC SDS IS MAXIMUM 2.40
- [x] THE PROJECT SITE IS NOT IN A FLOOD ZONE OTHER THAN ZONE 'X'. IF SO, THEN A GEOTECHNICAL LETTER IS REQUIRED PER IR PC-4 1.7.2.
- [x] THE PROJECT SITE IS NOT IN AN AREA WITH SNOW LOADING EXCEEDING 5 PSF.
- [ ] THE PROJECT IS DESIGNED FOR VERY HIGH FIRE HAZARD SEVERITY ZONE (AREAS PER CBC CHAPTER 7A.
- [x] THE ALLOWABLE SOIL BEARING PRESSURE IS 1500psf OR GREATER
- [x] IF THE CANOPY SIZE IS <1600s.f. IN AREA, NO GEOTECHNICAL/GEOHAZARDS REPORT IS REQUIRED.
- [ ] IF THE CANOPY SIZE IS >1600s.f. AND <4000s.f. AND THERE IS A GEOTECHNICAL REPORT PROVING THAT NO POTENTIAL FOR LIQUIFICATION EXISTS, NO GEOHAZARDS REPORT IS REQUIRED.
- [ ] IF THE CANOPY SIZE IS >4000s.f., A SITE SPECIFIC GEOTECHNICAL/GEOHAZARD REPORT IS REQUIRED GEOTECHNICAL/GEOHAZARD REPORT REQUIRED IN MAPPED GEOLOGIC HAZARD ZONES AND AS REQUIRED BY IR A-4.
- [x] THE CANOPY SIZE PROVIDES THE MAXIMUM REQUIRED AREA FOR SELECTED ASSEMBLY USE AND DESIRED OCCUPANCY LOAD (SEE ASSEMBLY USE CHECKLIST)
- [x] THE PROJECT IS NOT INTENDED TO PROVIDE SOLAR PANELS
- [x] THE PROJECT DOES NOT INCLUDE FIRE SPRINKLERS.

ASSEMBLY USE SELECTION CHECKLIST

THE FOLLOWING CHECKLIST IS TO BE USED BY THE PARTY SUBMITTING THIS PRE-CHECK TO INDICATE THE INTENDED ASSEMBLY USE FOR THIS STRUCTURE.

- [ ] DINING CANOPY - ASSEMBLY USE - 'A2'
- [ ] SHADE STRUCTURE - ASSEMBLY USE - 'A'
- [ ] SHADE STRUCTURE - OUTDOOR INSTRUCTIONAL USE - ASSEMBLY USE - 'E'
- [x] SHADE STRUCTURE OVER PLAY EQUIPMENT - ASSEMBLY USE - 'E'
- [ ] SHADE STRUCTURE OVER PARKING - ASSEMBLY USE - 'S2' OR 'U'

SITE-SPECIFIC CODE ANALYSIS

THE SECTION IS TO BE FILLED OUT BY THE ARCHITECT OF RECORD FOR THE SITE-SPECIFIC APPROVAL

- [x] OCCUPANCY GROUP: E (SEE USE CHECKLIST) — OCCUPANCY LOAD FACTOR: 50
- [x] OCCUPANCY LOAD: 8
- [x] TYPE OF CONSTRUCTION: TYPE II-B
- [x] PROPOSED AREA: 400 SF
- [x] ALLOWABLE AREA: 14,500 SF

CANOPY SIZE SELECTION CHECKLIST

THE FOLLOWING CHECKLIST IS TO BE USED BY THE PARTY SUBMITTING THIS PRE-CHECK TO INDICATE THE INTENDED SIZES USED FOR THIS PRE-CHECK STRUCTURE. SITE SPECIFIC AOR TO SPECIFY IF CONJOINED OR NON-CONJOINED COLUMNS PER SHEET S2.0.

- [x] 20'X20'
- [ ] 30'X30'
- [ ] 40'X30'
- [ ] _____'X_____' (FOR INTERMEDIATE SIZE)
- [ ] _____'X_____' (FOR INTERMEDIATE SIZE)
- [ ] _____'X_____' (FOR INTERMEDIATE SIZE)

NOTES:
1. PLAN DIMENSIONS ARE REPEATABLE IN ANY ONE DIRECTION TO A TOTAL AREA OF 4000 SQ.FT. STRUCTURALLY. MAXIMUM SIZES MAY BE LESS DUE TO RISK CATEGORY THRESHOLDS. SEE TABLE 1604.5, 2022 CBC.
2. INTERMEDIATE SIZES MAY USE THE MEMBER SIZES, CONNECTIONS, AND FOUNDATIONS OF THE NEXT LARGEST CANOPY PROVIDED NO SINGLE PLAN DIMENSION, LENGTH OR WIDTH VARIES BY MORE THAN 35%. ADDITIONALLY, THE EVE AND RIDGE HEIGHTS OF THE LARGER CANOPY IS NOT EXCEEDED.

COLUMN HEIGHTS:
- [ ] 9' COLUMN HEIGHT
- [ ] 10' COLUMN HEIGHT
- [ ] 11' COLUMN HEIGHT
- [x] 12' COLUMN HEIGHT
- [ ] 14'/16' COLUMN HEIGHT(HYPAR & TRIANGULAR SHADES)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

rea architect RONEDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net

LICENSED ARCHITECT RONALD W. EDWARDS C-25192 Exp. 08-31-25 STATE OF CALIFORNIA

MANUFACTURER:

CUSTOM CANOPIES INC.
11815 BURKE STREET

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT CODE: 2022 CBC
A separate application for construction is required

PC APPROVAL STAMP:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123036 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 04/12/2024

PRECHECK FABRIC SHADE STRUCTURE II

TITLE SHEET

Project # 22-037
Drawn By RWE
Date 1-10-24

T001

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

General

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

**NOTE: Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required	GE (Geotechnical Engineer) – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	LOR (Laboratory of Record) – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
Test – Indicates that a test is required	PI (Project Inspector) – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report

S1. GENERAL:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☒	a. Verify that • Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. • Foundation excavations are extended to proper depth and have reached proper material. • Materials below footings must not contain loose material, mud, organic silt, organic clays, or peat.	See Notes	PI	Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations and/or within the building envelope is not permitted without a geotechnical report.

S2. SOIL COMPACTION AND FILL:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Perform classification and testing of fill materials.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☐	b. Verify use of proper materials, densities and inspect lift thickness, placement and compaction during placement of fill.	Continuous	LOR*	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.
☐	c. Compaction testing.	Test	LOR*	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.

S3. DRIVEN DEEP FOUNDATIONS (PILES):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	b. Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☐	c. Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	d. Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	e. Steel piles.	Provide tests and inspections per STEEL section below.		
☐	f. Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
☐	g. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):

	Test or Special Inspection	Type	Performed By	Code References and Note
☑	a. Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	PI	Continuous Inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.
☑	b. Verify pier locations, diameters, plumbness and lengths.Record concrete or grout volumes.	Continuous	PI	Continuous Inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.
☑	c. Concrete piers.	Provide tests and inspections per CONCRETE section below.		

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

	Test or Special Inspection	Type	Performed By	Code References and Notes

S5. RETAINING WALLS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Placement, compaction and inspection of backfill.	Continuous	GE*	1705A.6.1. * By geotechnical engineer or his or her qualified representative. (See section S2 above).
☐	b. Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	c. Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. See DSA IR 18-2.
☐	d. Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☐	e. Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

S6. OTHER SOILS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS (California Geological Survey) for final acceptance. * By geotechnical engineer or his or her qualified representative.
☐	b. Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	c.			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3, ACI 318-19 Sections 26.12 & 26.13

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item 9; ACI 318-19 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13, and PCI MNL-128 and -130.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (NDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3, ACI 318-19 Sections 26.12 & 26.13

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

C4. SHOTCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect shotcrete placement for proper specification and techniques.	Continuous	SI	1705A.3.9, Table 1705A.3 Item 7; 1908A.1, 1908A.2, 1908A.3; See ACI 506.2-13 Section 3.4, ACI 506R-16.
☐	b. Sample and test shotcrete (f'c).	Test	LOR	1908A.2, 1705A.3.9

C5. POST-INSTALLED ANCHORS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect installation of post-installed anchors	See Notes	SI*	1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic); 1705A.3.8 (See Appendix (end of this form) for exemptions); ACI 318-19 Section 26.13. * May be performed by the project inspector when specifically approved by DSA.
☐	b. Test post-installed anchors.	Test	LOR	1910A.5. (See Appendix (end of this form) for exemptions.)

C6. OTHER CONCRETE:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.2, ACI 303-16, ASC 341-16, ASC 318-16, ASC 360-16, AISI S100-20/RCSC 2016, AWS D1.1, AWS D1.4, AWS D1.8

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify mix design.	Continuous	SI	Table 1705A.3 Item 1; 1904A.1
☐	b. Verify use of required mix design.	Continuous	SI	Table 1705A.3 Item 5, 1904A.1
☐	c. Batch plant inspection.	Periodic	SI	Table 1705A.3 Item 6; 1908A.3
☐	d. Verify in-situ concrete strength, prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	e. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item 9; ACI 318-19 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13, and PCI MNL-128 and -130.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (NDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5

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1705A.2.1, Table 1705A.2.1; AISC 360-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Type	Performed By	Code References and Notes

S/A6. NONDESTRUCTIVE TESTING:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Ultrasonic	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	b. Magnetic Particle	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	c.	Test	LOR	

S/A7. STEEL JOISTS AND TRUSSES:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.5, Table 1705A.2.3; AWS D1.1; DSA IR 22-3 for steel joists only. 1705A.2.4; AWS D1.3 for cold-formed steel trusses.

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1705A.2.1, Table 1705A.2.1; AISC 360-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Type	Performed By	Code References and Notes

S/A8. SPRAYED FIRE-RESISTANT MATERIALS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify acceptance of all aspects of application with DSA approved documents.	Periodic	SI	1705A.15, 1705A.15.1, 1705A.15.2, 1705A.15.3, 1705A.15.4, 1705A.15.5, 1705A.15.6.
☐	b. Test density.	Test	LOR	1705A.15.1, 1705A.15.5, ASTM E605
☐	c. Bond strength adhesion/cohesion.	Test	LOR	1705A.15.1, 1705A.15.6, ASTM E736

S/A9. ANCHOR BOLTS AND ANCHOR RODS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Anchor Bolts and Anchor Rods	Test	LOR	Identify, sample and test anchor bolts and anchor rods not meeting exemptions identified in Section 1 of IR 17-11.
☐	b. Threaded rod not used for foundation anchorage.	Test	LOR	Identify, sample and test threaded rods not meeting exemptions identified in Section 1 of IR 17-11.

S/A10. STORAGE RACK SYSTEMS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	Periodic	SI	Table 1705A.13.7
☐	b. Fabricated storage rack elements.	Periodic	SI	1704A.2.6, See 1705A.13.7

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1705A.2.1, Table 1705A.2.1; AISC 360-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Storage rack anchorage installation.	Periodic	SI	
☐	d. Completed storage rack system to indicate compliance special inspector or qualified technician when specified off-site.	Periodic	SI*	Table 1705A.13.7 * May be performed by the project inspector when specifically approved by DSA.

S/A11. Other Steel:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. •Material sizes, types and grades comply with requirements.	Periodic	*	1705A.2.1 Item 3a-3c, 2203A.1; AISC 360-16 Section A3.1 & A3.2; AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By with requirements.
☑	b. Test unidentified materials	Test	LOR	2203A.1.
☑	c. Examine seam welds of HSS shapes	Periodic	SI	DSA-IR 17-3.
☑	d. Verify and document steel fabrication per DSA-approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4).
☐	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.

S/A2. HIGH-STRENGTH BOLTS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify identification markings and manufacturer's certificates of compliance conforms to ASTM standards specified in the DSA-approved documents.	Periodic	SI	Table 1705A.2.1 Item 1a & 1b, 2202A.1; AISC 360-16 Section A3.3, J3.1, and N5.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-6 & DSA IR 17-9.
☐	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 1705A.2.1 Item 1c, 2213A.1; RCSC 2014 Section 7.2, DSA IR 17-6.
☐	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 1705A.2.1 Item 2a; 1705A.2.6, 2204A.2; AISC 360-16 J3.3, J3.2, M2.3 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-5.
☐	d. Pretensioned and slip-critical connections.	*	SI	Table 1705A.2.1 Items 2b & 2c; 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.3 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-5. *"Continuous" or "Periodic" depends on the tightening method used.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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S/A3. WELDING:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	1705A.2.5, Table 1705A.2.1 Items 4 & 5; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel. AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
☑	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.

S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1–4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect welding of sheets and railing systems.	Periodic	SI	1705A.2.2; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.3 & D1.3; DSA IR 17-3.
☐	d. Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	e. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b; 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.3, AWS D1.4, AWS D1.8

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S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1–4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	b. Inspect single-pass fillet welds ≤ 5/16".	Periodic	SI	Table 1705A.2.1 Item 5a.5; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	2213A.2; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	d. Inspect floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Item 5a.6; AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	1705A.2.5; AWS D1.3; DSA IR 17-3. The quality control provisions of AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	f. Inspect welding of stairs and railing systems.	Periodic	SI*	1705A.2.1; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	g. Verification of reinforcing steel weldability.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	h. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b; 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-123036 | School Name: | School District:
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WELDING:

☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.3) meeting the following: A) when supported on a floor/roof, <4000# and resulting composite center of mass (including component's center of mass) <4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 pff for distributed systems.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2022 CBC

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

Name of Architect or Engineer in general responsible charge:

Name of Structural Engineer (When structural design has been delegated):

Signature of Architect or Structural Engineer: Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-123036 | School Name: | School District:
DSA File Number: | Increment Number: | Date Created: 2024-01-10 15:15:54

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

NOTES

1. THE EXAMPLE FORM DSA-103(s) SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY. A FORM DSA-103 IS TO BE FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE DSA-103(s) ARE TO BE CROSSED OUT ON THIS DRAWING.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 7/8/2024

rea architect RONEDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@reaarchitect.net

LICENSED ARCHITECT RONALD W. EDWARDS C-25192 Exp. 12-31-25 STATE OF CALIFORNIA

MANUFACTURER:

CUSTOM CANOPIES INC.
11815 BURKE STREET

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
2022 CBC
A separate application for construction is required
PC APPROVAL STAMP:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123036 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 04/12/2024

PRECHECK FABRIC SHADE STRUCTURE II

T&I GUIDELINE

Project # 22-037
Drawn By RWE
Date 1-10-24

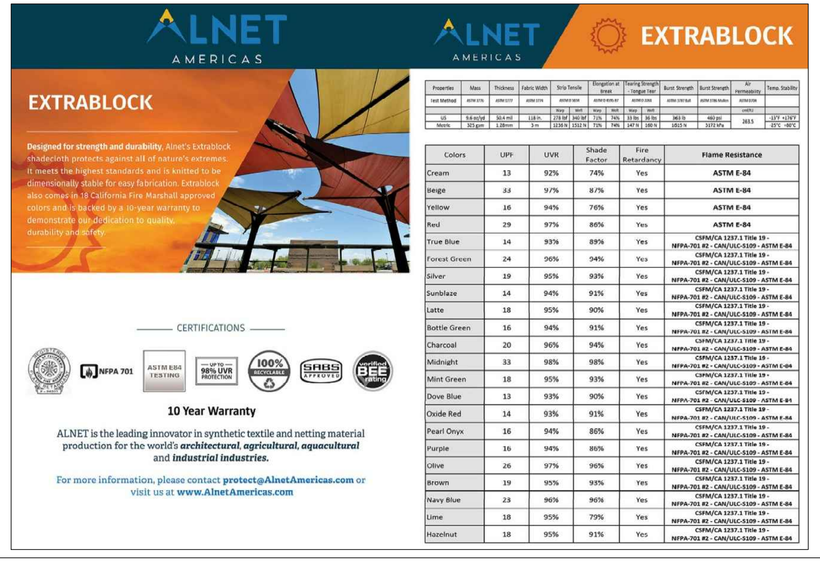
T002

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE 2022 C.B.C. AND THE A.C.I. 319-14 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
2. SLAB AND FOUNDATION CONCRETE SHALL BE 150 P.C.F. HARDROCK, MIXED PER A.S.T.M. C-94, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,500 P.S.I. AT 28 DAY. MAX. SLUMP TO BE 4" ± 1" OF W/C RATIO < .45
3. THE MAXIMUM SIZE AGGREGATE IN FOUNDATION AND MASS CONCRETE WORK SHALL BE 1 INCH.
4. CEMENT SHALL CONFORM TO A.S.T.M.. C-150 TYPE V, LOW ALKALI. AGGREGATES FOR NORMAL WEIGHT SHALL CONFORM TO A.S.T.M. C-33.
5. ADMIXTURES AND COLORS (EXCEPT AS NOTED HEREIN) SHALL NOT BE USED UNLESS SUBSTANTIATING DATE IS SUBMITTED TO AND ACCEPTED BY THE ENGINEER AND ARCHITECT OF RECORD AND DSA.
6. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. THE MIX DESIGNS SHALL CONFORM TO ACI 318-19 SECTION 26.4.3. UNLESS NOTED OTHERWISE.
7. NON-STRUCTURAL STEEL EMBEDDED IN CONCRETE SHALL BE GALVANIZED OR PAINTED. ALL DAMAGED GALVANIZED AREAS SHALL BE REPAIRED PRIOR TO EMBEDMENT.
8. READY MIXED CONCRETE SHALL CONFORM TO (A.S.T.M. C-94).
9. PLACEMENT OF CONCRETE SHALL CONFORM THE 2022 C.B.C. AND THE TO A.C.I. 304. CLEAN AND ROUGHEN A FULL AMPLITUDE OF $\frac{3}{4}$" BY REMOVING THE ENTIRE SURFACE AND EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN THE MORTAR MATRIX AGAINST ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE POURED.
10. ALL EXPOSED CONCRETE SHALL HAVE A SMOOTH FORM FINISH USING B-B PLYFORM, CLASS I, EXT-A.P.A. PLYWOOD.
11. ALL SLABS SHALL HAVE A TROWELED FINISH EXCEPT AS NOTED ON THE DRAWINGS.
12. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
13. IF THE CONTRACTOR DESIRES TO MAKE ANY CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THESE DRAWINGS, HE SHALL SUBMIT DETAILS OF CHANGES TO THE ENGINEER OF RECORD FOR REVIEW BEFORE STARTING WORK AND THE ENGINEER OF RECORD TO OBTAIN DSA APPROVAL PRIOR TO STARTING WORK.
14. NO BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOUNDATION STEEL OF THE GROUND.
15. PROVIDE $\frac{3}{4}$ INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS, U.N.O.
16. MINIMUM CONCRETE COVERAGES

FOOTINGS CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	2"

17. CONCRETE CURING:
SLAB AND FDN; TYPICALLY REQUIRED FOR 10 DAYS TO ACHIEVE A MINIMUM OF 3000 PSI STRENGTH PRIOR TO INSTALLATION OF OTHER MAJOR STRUCTURAL COMPONENTS.



Properties	Mass	Thickness	Fabric Width	Strip Tensile		Elongation at break		Tearing Strength - Tongue Tear		Burst Strength	Burst Strength	Air Permeability	Temp. Stability
Test Method	ASTM D76	ASTM D777	ASTM D774	ASTM D5034		ASTM D 4595-17		ASTM D 5587		ASTM D3786 Bal	ASTM D3786 Modern	ASTM D6766	
				warp	weft	warp	weft	warp	weft			cm/s/cm2	
US	9.4 oz/yd	50.4 mil	118 in.	278 lbf	340 lbf	71%	74%	33 lbs	36 lbs	360 lb	460 psi	260.5	-13°F +176°F
Metric	321 gsm	1.28mm	3 m	1236 N	1512 N	71%	74%	147 N	160 N	1633 N	3172 kPa		-25°C +80°C

Colors	UPF	UVR	Shade Factor	Fire Retardancy	Flame Resistance
Cream	13	92%	74%	Yes	ASTM E-84
Beige	33	97%	87%	Yes	ASTM E-84
Yellow	16	94%	76%	Yes	ASTM E-84
Red	29	97%	86%	Yes	ASTM E-84
True Blue	14	93%	89%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Forest Green	24	96%	94%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Silver	19	95%	93%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Sunblaze	14	94%	91%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Latte	18	95%	90%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Bottle Green	16	94%	91%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Charcoal	20	96%	94%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Midnight	33	98%	98%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Mint Green	18	95%	93%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Dove Blue	13	93%	90%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Oxide Red	14	93%	91%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Pearl Onyx	16	94%	86%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Purple	16	94%	86%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Olive	26	97%	96%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Brown	19	95%	93%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Navy Blue	23	96%	96%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Lime	18	95%	79%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84
Hazelnut	18	95%	91%	Yes	CSFM/CA 1237.1 Title 19 - NFPA-701 #2 - CAN/ULC-S109 - ASTM E-84

FOUNDATION:

1. THIS P.C. IS DESIGN TO THE C.B.C. MINIMUM. WHERE SOIL REPORT IS AVAILABLE; ATTACH ONE COPY OF SOILS REPORT TO THE APPROVED SET OF CONSTRUCTION DOCUMENTS. SOILS REPORT SHALL BE PART OF THESE NOTES. PRIOR TO THE POURING OF CONCRETE AND PRIOR TO THE CONTRACTOR REQUESTING A DSA FOUNDATION INSPECTION, THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE FOOTING EXCAVATIONS. HE SHALL POST NOTICE ON THE JOB SITE AND ADVISE THE DSA INSPECTOR IN WRITING THAT THE WORK SO INSPECTED MEETS THE CONDITIONS OF THE REPORT. A WRITTEN CERIFICATION TO VERIFY THAT:
   A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOIL REPORT.
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED, AND
   C. THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.
2. SOIL REMOVAL AND RECOMPACTION SHALL BE DONE PER SOILS REPORT RECOMMENDATIONS UNDER GEOTECHNICAL ENGINEERS'S SUPERVISION AND INSPECTION.
3. TYPE OF FOOTING:
   A. DESIGN SOIL PRESSURE:

FOOTING TYPE	STATIC BEARING PRESSURE
DEEP FOOTING	1,500 psf
LATERAL BEARING	100 pcf*

   *MAY BE DOUBLED PER SECTION 1806A.3.4
4. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
5. THE CONTRACTOR SHALL DETERMINE LOCATION OF UTILITY SERVICES IN AREAS TO BE EXCAVATED BEFORE BEGINNING EXCAVATION. EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING. DAMAGE CAUSED AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, APPROVALS, PERMITS, INSTALLATION AND MONITORING OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN TEMPORARY EXCAVATIONS.
7. ALL PLANTERS IN CLOSE PROXIMITY TO THE STRUCTURE SHALL HAVE ADEQUATE DRAINAGE OF SURFACE WATER TO PREVENT SATURATION OF SOIL UNDER FOUNDATION.
8. 2022 C.B.C. SEISMIC SITE CLASS A, B, C, D, + D-DEFAULT

GENERAL NOTES:

1. THE PROJECT SPECIFICATIONS SHALL BE PART OF THE CONTRACT DOCUMENTS.
2. THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE DURING THE BIDDING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARING WORK. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES PRIOR TO PROCEEDING.
4. ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE CALIFORNIA BUILDING CODE (2022 EDITION C.B.C.), RELATED CALIFORNIA BUILDING CODE STANDARDS, AND ANY A.S.T.M. SPECIFICATIONS ON WHICH THESE STANDARDS ARE BASED. WHERE CONFLICT BETWEEN BUILDING CODES AND SPECIFICATIONS OCCURS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
5. ALL A.S.T.M. DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATION, AS OF THE DATE OF THESE DRAWINGS.
6. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
7. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
8. THE STRUCTURAL DRAWINGS SHOW ONLY THE BASIC STRUCTURAL REQUIREMENTS. REFER TO CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS THAT OCCUR PER SPECIFIC PLANS FOR NON-STRUCTURAL ITEMS, SUCH AS:
   A. SIZE AND LOCATION OF ALL OPENINGS.
   B. SIZE AND LOCATION OF ALL NON-BEARING WALLS.
   C. SIZE AND LOCATION OF ALL CONCRETE CURBS, WALKS, ROOF AND FLOOR DRAINS, SLOPES, DEPRESSED SLAB AREAS, ETC.
   D. FLOOR, ROOF AND WALL FINISHES.
   E. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
9. THE STRUCTURAL CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
10. NEITHER THE OWNER NOR THE ARCHITECT/STRUCTURAL ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STARE AND FEDERAL SAFETY AND HEALTH STANDARDS, SLAWS AND REGULATIONS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE SAFETY ITEMS.
11. SATISFACTORY EXECUTION OF CONSTRUCTION IS DEPENDENT UPON CONFORMANCE WITH THE INTENT OF THESE DRAWINGS. OWNER OR CONTRACTOR SHALL RETAIN A CALIFORNIA LICENSED STRUCTURAL ENGINEER DURING CONSTRUCTION TO OBSERVE THE CONSTRUCTION AND FILE A REPORT (DSA 6AE) STATING THE "THE CONSTRUCTION HAS, IN EVERY MATERIAL RESPECT, BEEN PERFORMED IN COMPLIANCE WITH THE DSA APPROVED DOCUMENTS".
12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL. WHEN WEIGHT OF MATERIALS OR EQUIPMENT MAY EXCEED DESIGN LOAD, STRUCTURAL SYSTEMS SHALL BE SHORED.
13. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK. THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

DESIGN BASIS:

CODE: 2022 C.B.C. (CALIFORNIA BUILDING CODE CCR, TITLE 24, PART 2)

GRAVITY LOADS:

1. ROOF LIVE LOAD 5 P.S.F.
2. ROOF DEAD LOAD 1.5 P.S.F. (MAX.)
3. SNOW LOAD Pg 5.0 PS.F.

LATERAL LOADS:

1. SEISMIC DESIGN

☐ SITE CLASS D Default were no Geotechical Report required

RISK CATEGORY = II
REDUNDANCY (p) = 1

S_S = 2.5
S_{DS} = 1.67

S_{ds} = S_{ms} X 2/ 3

☐ CANOPIES OCCUPANCY = II

☐ ORDINARY STEEL CANTILEVER COLUMNS

SEISMIC DESIGN CATEGORY = E (ASCE 7-16 TABLE 11.6.1 AND TABLE 11.6.2)
I_e = 1.25
R = 1.25
$C_S = S_{ds}/(R/I_e)$ (LRFD) = 1.33 Ultimate (0.993 ASD)
ANALYSIS METHOD = EQUIVALENT LATERAL FORCE ANALYSIS

Note: Design values may also be used conservatively where Site Class C is justified by location specific Geotechnical Report

2. WIND DESIGN
ANALYSIS METHOD = DIRECTIONAL PROCEDURE (OPEN STRUCTURE)
V = 110 M.P.H. BASIC WIND SPEED, ASCE 7-16
EXPOSURE "C"
Kzt = 1.0
RISK CATEGORY = II
SITE CLASS "D-DEFAULT"

STRUCTURE IS DESIGN FOR CLEAR WIND FLOW

FLOOD HAZARD: DESIGN DOES NOT ACCOUNT FOR FLOOD HAZARD

SITE SPECIFIC GEOTECHNICAL STUDY IS NOT REQUIRED FOR

THIS PC PROJECT IS NOT DESIGNED TO INCLUDE WEIGHT OF SPRINKLERS

BUILDING SEPARATION REQUIREMENT:

MINIMUM CLEAR DISTANCE REQUIRED BETWEEN EXISTING SITE STRUCTURE/ ADJACENT SITE STRUCTURE AND SHADE STRUCTURE IS TO BE AT LEAST 5' FROM OUTER EDGE OF FABRIC TO OUTER EDGE OF STRUCTURE AND PER EMBEDDED DOUBLE POST OPTION BETWEEN SHADE STRUCTURES IN THE SAME APPLICATION.

SEISMIC BASE SHEAR (LRFD)	
BUILDING CONFIGURATION	BASE SHEAR (KIP)
20'X20'	1.5K
30'X30'	3.00K
40'X30'	3.50K

REGISTERED PROFESSIONAL ENGINEER
JAMES L. MITCHELL
S 3081
EXP. 6/30/2025
STRUCTURAL
STATE OF CALIFORNIA
2/16/24

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PRECHECK FABRIC SHADE STRUCTURE II

Project #	22-037
Drawn By	RWE
Date	12-20-22

S1.1

FNAME
REVDATE
USER

STRUCTURAL OBSERVATION:

1. PER C.B.C. CHAPTER 17A, 1704A.6 THE OWNER SHALL EMPLOY A LICENSED ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, OR HIS DESIGNATED ENGINEER OR ARCHITECT TO MAKE SITE VISITS TO OBSERVE. GENERAL COMPLIANCE WITH THE APPROVED STRUCTURAL PLANS, SPECIFICATIONS AND CHANGE ORDERS. THE ENGINEER OR ARCHITECT SHALL SUBMIT A STATEMENT IN WRITING TO THE BUILDING OFFICIAL STATING THAT THE SITE VISIT HAS BEEN MADE AND THAT ANY DEFICIENCIES NOTED HAVE BEEN CORRECTED.

2. IN ACCORDANCE WITH SECT. 4-333 (a) OF TITLE 24, PART 1, STRUCTURAL OBSERVATION SHALL INCLUDE AND OCCUR AT THE FOLLOWING STAGES:
   A. OBSERVATION AT THE SITE PRIOR TO PLACING CONCRETE.
   B. OBSERVATION OF THE BUILDING DURING FABRICATION AFTER MAJORITY OF STRUCTURAL ITEMS ARE IN PLACE.
   C. OBSERVATION OF THE COMPLETED STRUCTURE PRIOR TO BEING COVERED FINISHES.

3. AT COMPLETION OF IN-PLANT MANUFACTURING THE INDIVIDUAL ACCEPTING RESPONSIBILITY FOR OBSERVATION OF IN-PLANT MANUFACTURING SHALL SIGN THE VERIFIED REPORT, DSA 152-IPI (IN-PLANT INSPECTOR VERIFIED REPORT).

4. OBSERVATION OF THE ON SITE CONSTRUCTION INCLUDES THE SCOPE OF WORK INDICATED ON THE DSA APPROVED BUILDING PLANS AND SPECS.

5. INTERIM AND FINAL VERIFIED REPORTS ARE REQUIRED DURING, AND AT THE COMPLETION OF, ON SITE CONSTRUCTION AND INSTALLATION USING FORM DSA 6-AE (ARCHITECT/ENGINEER VERIFIED REPORT).

6. STRUCTURAL TESTING & SPECIAL INSPECTIONS: SEE APPROVED DSA-103 FORM FOR STRUCTURAL TESTING AND INSPECTIONS.

COLD FORMED STRUCTURAL STEEL:

1. ALL LIGHT GAUGE METAL FRAMING SHALL BE THE TYPE, SIZE, GAUGE AS SHOWN ON THE PLANS AND BE FABRICATED AND ERECTED IN ACCORDANCE WITH 2016 (2020) A.I.S.I. S100 SPECIFICATIONS. WITH SUPPLEMENT 2 AND 2022 CBC SECTIONS 2210A, 2211A, &2213A.

2. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 OR A153 CLASS D OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD FORMER STEEL MEMBERS SHALL BE 5 PERCENT ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AMERICAN IRON AND STEEL INSTITUTE (AISI) S240 TABLE A4-1, CP 90 COATING DESIGNATION.

3. TOUCH UP COLD GALVANIZING USING ZRC CHEMICAL PRODUCTS CO., ZRC COLD GALVANIZING COMPOUND OR EQUAL.

STEEL CABLES:

1. ALL CABLE STEEL TO BE ASTM A1023, 6X19 CLASS IWRC OR 7x19 CLASS IWRC

2. CABLES SHALL BE GALVANIZED (CLASS A ZINC COATING) OR STAINLESS STEEL, CLASS BRIGHT WIRE ROPE

3. MAXIMUM CABLE STRENGTH: (Service loads)

5 / 16"	7X19 304 SS	=	3.068K
3 / 8"	7X19 304 SS	=	4.091K
7/16"	6X19 Galv.	=	6.259K
1/2"	6X19 Galv.	=	8.181K

4. MAXIMUM. PRETENSION LOAD:(Service loads)

1 / 4"	DIA.	=	0.30k
3 / 8"	DIA.	=	0.30k
7/ 16"	DIA.	=	0.30k
1/2"	DIA	=	0.50K

5. FOR CABLE (ROPE CLIPS) SEE SHEET 1 OF EACH SIZE

WELDING:

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN WELDING SOCIETY CODE D1.1.-15, AND CBC.

2. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS.

3. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC PROCESS USING APPROVED ELECTRODES PER A.W.S. SPECIFICATIONS E70XX (LOW HYDROGEN ELECTRODES).

4. ALL WELDS SHALL HAVE A WELD CONTROLLED SEQUENCE AND TECHNIQUE IN ORDER TO MINIMIZE SHRINKAGE, STRESSES AND DISTORTION.

5. ALL ELECTRODES FILLER MATERIAL SHALL BE A MINIMUM OF E70XX.

6. SPECIAL INSPECTION IS REQUIRED FOR ALL WELDING.

STEEL:

1. QUALIFIED AND CERTIFIED WELDERS SHALL BE USED FOR ALL WELDING. ALL WELDING TO CONFORM TO THE LATEST ADOPTED EDITION OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE A.W.S. D1.1.

2. MATERIALS:

MISCELLANEOUS PLATES	A.S.T.M. A-36
STRUCTURAL STEEL PIPES	A.S.T.M. A500 Gr. B, Fy = 42 ksi
WELDING ELECTRODES	A.W.S. STRUCTURAL STEEL E70XX,
TYPICAL STEEL CONNECTION BOLTS	GALVANIZED A307
GALVANIZING	A.S.T.M. A-123
RUST-INHIBITING PRIMER	CC-M10
STEEL TUBING	A.S.T.M. A-500, GRADE C (HSS ROUND) (Fy = 46 K.S.I.) (HSS RECT) (Fy = 50 K.S.I.)

3. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM.

4. CONNECTED MEMBERS SHALL BEAR ONLY UPON UNTHREADED PORTIONS OF BOLTS.

5. BURNING OF HOLES IS NOT ALLOWED.

6. INSPECTION OF WELDING SHALL CONFORM TO C.B.C. REQUIREMENTS (CHAPTER 17A).

7. THE STRUCTURAL STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

8. BOLT HOLES SHALL BE 1 / 8" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLTS USED, UNLESS NOTED OTHERWISE.

9. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.

10. OPENINGS SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED.

REGISTERED PROFESSIONAL ENGINEER
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PRECHECK FABRIC SHADE STRUCTURE II

Project # 22-037	S1.2
Drawn By RWE	
Date 12-20-22	

ABBREVIATIONS:

&	AND
@	AT
℄	CENTER LINE
℞	PLATE, PROPERTY LINE
A.B.	ANCHOR BOLT
ADJ	ADJACENT
A.F.F.	ABOVE FINISH FLOOR
ARCH'L	ARCHITECTURAL
BD	BOARD
BLD'G	BUILDING
BLK	BLOCK
BLK'G	BLOCKING
BLW	BELOW
BM	BEAM
B.N.	BOUNDARY NAIL/SCREW
BOT.	BOTTOM
BRG	BEARING
B.S.	BOTH SIDE
BTWN	BETWEEN
C.B.	CARRIAGE BOLT
C.F.	CUBIC FOOT
CHAM	CHAMFER
C.I.	CAST-IRON
C.I.P.	CAST-IN-PLACE
C.J.	CONTROL JOINT
CLG	CEILING
CLK	CAULK
CLK'G	CAULKING
CLR.	CLEAR
C.M.U.	CONCRETE MASONRY UNIT
CNTR	CENTER
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CNTRSNK	COUNTERSINK
d	PENNY
DBL	DOUBLE
DEP	DEPRESSED
DET	DETAILED
D.F.	DOUGLAS FIR
D.F.L.	DOUGLAS FIR/LARCH
DIA	DIAMETER
DIAG	DIAGONAL
DIAM.	DIMENSION
D.L.	DEAD LOAD
DN	DOWN
DIV	DIVISION
DR	DOOR
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.F.	EACH FACE
EL.	ELEVATION
ELEV.	ELEVATION / ELEVATOR
EMBED	EMBEDMENT
E.N.	EDGE NAIL/SCREW
EQ.	EQUAL
EQUIP	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST'G	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
F.D.	FLOOR DRAIN
FDN	FOUNDATION
F.F.	FINSIH FLOOR
FIN.	FINISH
F.N.	FIELD NAIL
F.O.	FACE OF
FRM'G	FRAMING
F.S.	FAR SIDE
FT	FEET / FOOT
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
G.I.	GALVANIZED IRON
GLB	GLU-LAMINATED BEAM
GRD	GRADE
GYP	GYPSUM
H.D.	HOLDOWN
HDR	HEADER
HGR	HANGER
HORIZ	HORIZONTAL
HRD	HARD
H.S.B.	HIGH STRENGTH BOLT
HT.	HEIGHT
HVAC	HEATING, VENTILATION, & AIR CONDITIONING
IN.	INCH
INSP.	INSPECTION / INSPECTOR
INT.	INTERIOR
JST	JOIST
JT	JOINT
KIPS	KILOPOUNDS (1,000 POUNDS)
K.O.	KNOCK OUT
LB	POUND
L.B.	LAG BOLT
L.F.	LINEAR FOOT
LG	LONG
L.L.	LIVE LOAD
L.L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
L.S.	LAG SCREW
LT.	LIGHT
MAS	MASONRY
MAT.	MATERIAL
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MECH'L	MECHANICAL
MEZZ.	MEZZANINE
MIN.	MINIMUM
M.H.	MANHOLE
MANUF.	MANUFACTURER
MTL.	METAL
N.S.	NEAR SIDE
N.I.C.	NOT IN CONTACT
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.H.	OPPOSITE HAND
OPN'G	OPENING
OPP	OPPOSITE
O.W.J.	OPEN WEB JOIST
P.C.	PRECAST
PERP.	PERPENDICULAR
PLYWD	PLYWOOD
PNL	PANEL
PREFAB	PREFABRICATED
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PT	POINT
P.T.	PRESSURE TREATED
P.V.C.	POLYVINYL CHLORIDE
RAD	RADIUS
R.D.	ROOF DRAIN
REF.	REFERENCE
REINF.	REINFORCED / REINFORCING
REQ'D	REQURIRED
REV	REVISION
RF	ROOF
RFTR	RAFTER
R.H.	ROOF HATCH
RM	ROOM
R.O.	ROUGH OPENING
R.S.	ROUGH SAWN
SCHED.	SCHEDULE
SECT.	SECTION
S.F.	SQUARE FOOT
SHT	SHEET
SHT'G	SHEETING
SIM.	SIMULAR
S.M.S.	SHEET METAL SCREW
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.	STAINLESS STEEL
STAGG.	STAGGARED
STD	STANDARD
STIFF.	STIFFENER
STL.	STEEL
STRUCT'L	STRUCTURAL
STS	SELF TAPPING SCREW
SYM	SYMMETRICAL
SYS	SYSTEM
T & B	TOP AND BOTTM
T & G	TONGUE AND GROOVE
TEMP	TEMPORARY
THK	THICK
THKN'D	THICKENED
THRU	THROUGH
T.L.	TOTAL LOAD
T.O.	TOP OF
T.S.G.	TAPERED STEEL GIRDER
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
U.T.	ULTRASONIC TESTING
VERT.	VERTICAL
W/	WITH
W/O	WITHOUT
WD	WOOD
WIN	WINDOW
W.P.	WATERPROOF / WORK POINT
W.P.J.	WEAKENED PLAN JOINT
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
W.W.M.	WELDED WIRE MESH

FNAME

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USER

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PRECHECK FABRIC SHADE STRUCTURE II

Project # 22-037	S1.3
Drawn By RWE	
Date 12-20-22	



7X19 Stainless Steel Cable

Diameter (in)	Weight per 100ft (lbs)	Nominal B.S. (lbs)	
		AISI 302,304	AISI 316
1/16	0.75	480	427
3/32	1.74	920	819
1/8	2.90	1,760	1,566
5/32	4.50	2,400	2,136
3/16	6.50	3,700	2,900
7/32	8.60	5,000	4,450
1/4	11.0	6,400	5,696
5/16	17.3	9,000	7,600
3/8	24.3	12,000	11,000

kulkani

MALLEABLE WIRE ROPE CLIPS



ZINC PLATED, MALLEABLE

Size in Inches	Min. Clips Required	Wire Rope Turn Back in Inches	Torque in Foot Pounds*	Approx. Wt. in Pounds	Dimensions in Inches						
					A	B	C	D	E	F	G
1/16**	3	4	2.0	0.030	0.15	0.65	0.45	0.38	0.38	0.45	0.69
1/8**	3	4.3/4	3.0	0.040	0.18	0.81	0.50	0.50	0.50	0.56	0.94
3/16	3	5.1/2	4.5	0.063	0.25	0.94	0.56	0.56	0.56	0.63	1.06
1/4	3	7	15.0	0.130	0.31	1.19	0.75	0.75	0.69	0.75	1.31
5/16	3	7.3/4	15.0	0.150	0.31	1.31	0.84	0.75	0.75	0.75	1.44
3/8	3	9.1/2	30.0	0.210	0.38	1.63	1.00	0.88	0.84	0.88	1.63
7/16	4	10.1/4	40.0	0.370	0.38	2.00	1.19	1.06	1.00	1.06	1.88
1/2	4	15.1/4	45.0	0.370	0.44	2.00	1.19	1.06	1.00	1.06	1.88
9/16	4	16	50.0	0.590	0.50	2.31	1.38	1.25	1.25	1.28	2.09
5/8	4	16	75.0	0.590	0.50	2.31	1.38	1.25	1.25	1.28	2.09
3/4	5	22.1/4	75.0	0.840	0.56	2.56	1.56	1.31	1.44	1.56	2.38
7/8	5	23.1/2	130.0	1.250	0.63	3.06	1.81	1.63	1.75	1.81	2.88
1	6	31	130.0	1.660	0.63	3.44	2.00	1.88	2.06	2.00	3.00
1.1/8	7	39	200.0	2.430	0.75	4.00	2.75	2.00	2.19	2.06	3.38
1.1/4	7	39	200.0	2.430	0.75	4.00	2.75	2.00	2.19	2.06	3.38

Meets the performance requirements of Federal Specification FF-C-450, current revision, Type 1, Class 2.**

* Based on clean, unlubricated threads. The table above shows the minimum torque required to reach maximum holding power of wire rope clips.

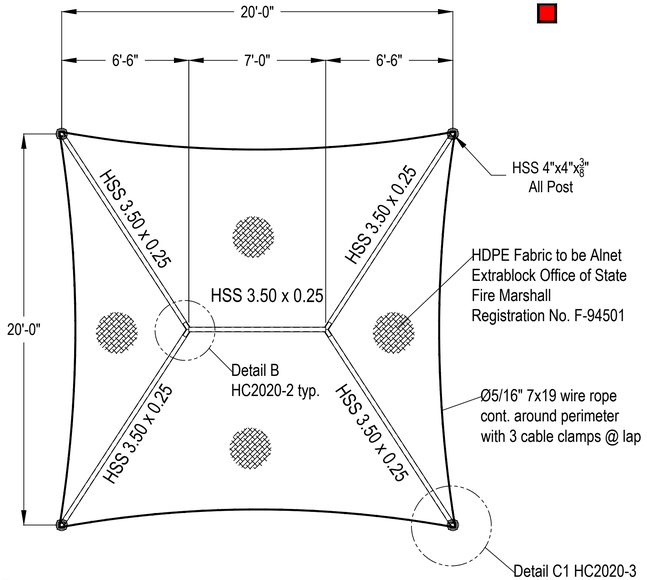
** NOTE: 1/16" and 1/8" are not covered by Federal Specification FF-C-450, current revision.

Improper use and installation of cast malleable wire rope clips can result in serious injury or death.

NEVER use cast malleable wire rope clips for lifting or suspending ANY load.

Cast malleable wire rope clips are to be used only for non-critical, light duty applications with small applied loads.

For complete installation instructions refer to page 48.

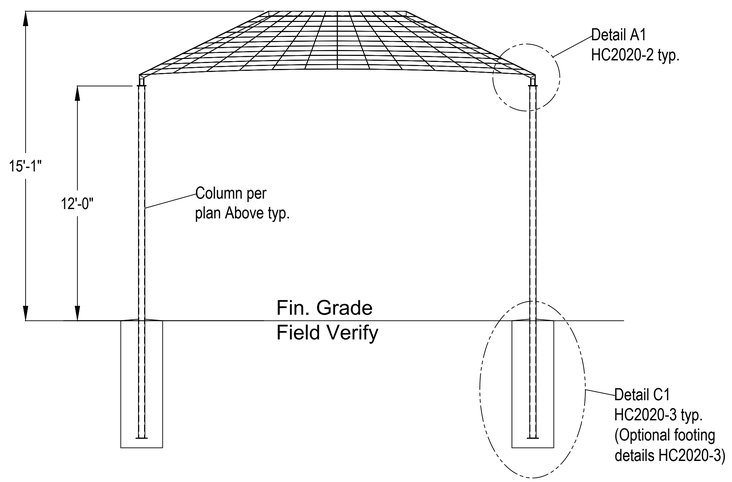


PLAN VIEW

NOTES:

1 - Steel Structure not designed for snow load accumulation in excess of 5.0 psf.
All Sails/cables shall be removed prior to snow load accumulation

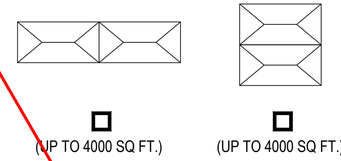
2 - Refer toHC2020-3 for footing details



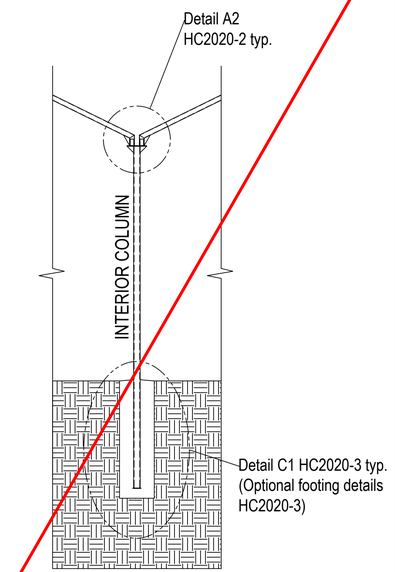
ELEVATION VIEW



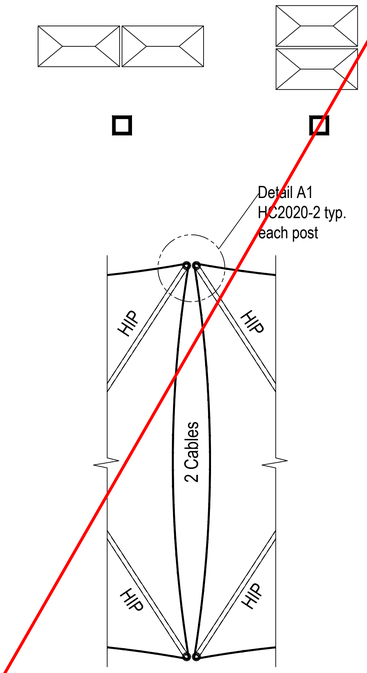
2/16/24



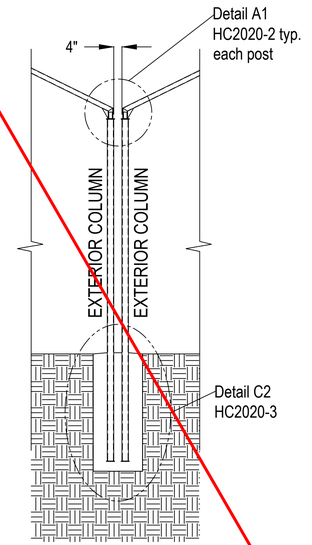
CONJOINED INTERIOR PLAN DETAIL - Single Post



CONJOINED INTERIOR COLUMN DETAIL - Single Post



DOUBLE EXTERIOR PLAN DETAIL - Double Post



DOUBLE EXTERIOR COLUMN DETAIL - Double Post

Scale: Not To Scale

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LICENSED ARCHITECT RONALD W. EDWARDS C 25192 REN 12-31-25 STATE OF CALIFORNIA

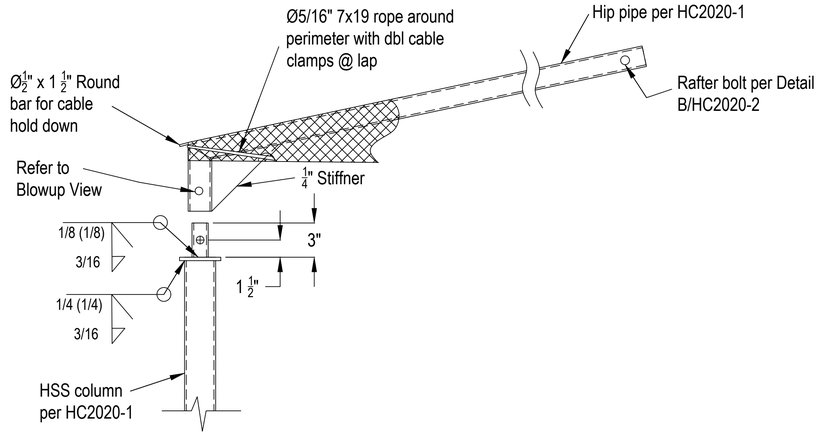
MANUFACTURER:

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

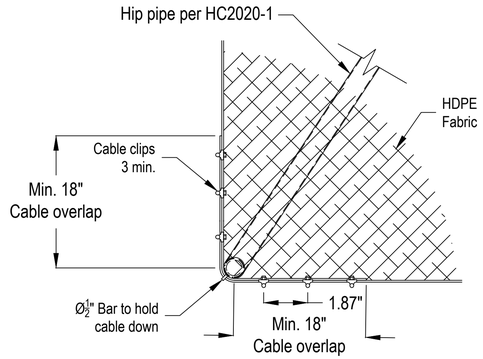
20'X20'X12' HIP CANOPY

Project #	
22-037	HC2020-1
Drawn By	
RWE	
Date	
12-20-22	

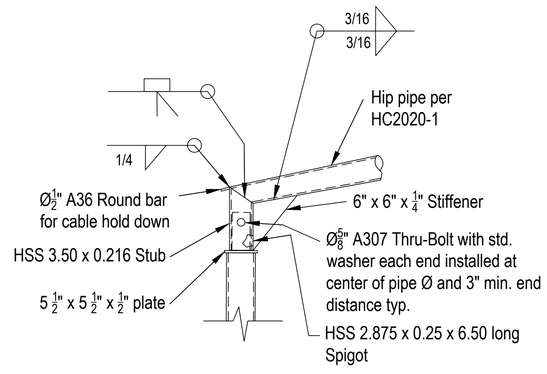
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USER



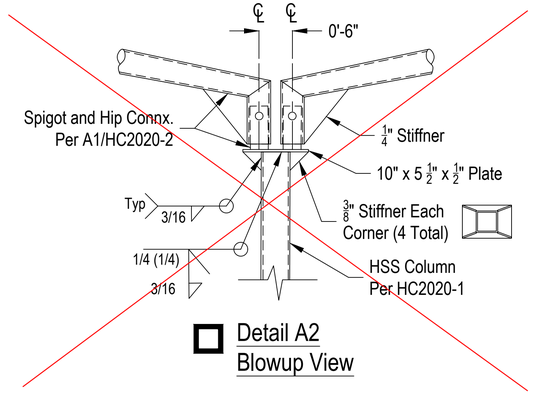
Detail A1



Detail A1 Top View

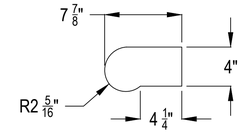


Detail A1 Blowup View

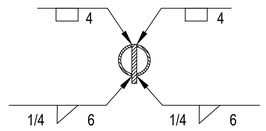


Detail A2 Blowup View

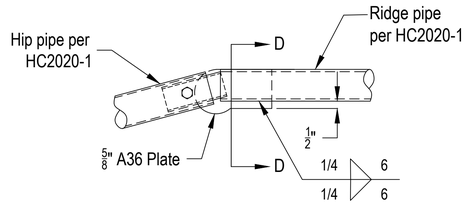
REGISTERED PROFESSIONAL ENGINEER
JAMES L. MITCHELL
S 3081
EXP. 6/30/2025
STRUCTURAL
STATE OF CALIFORNIA
2/16/24



Knife Plate Detail

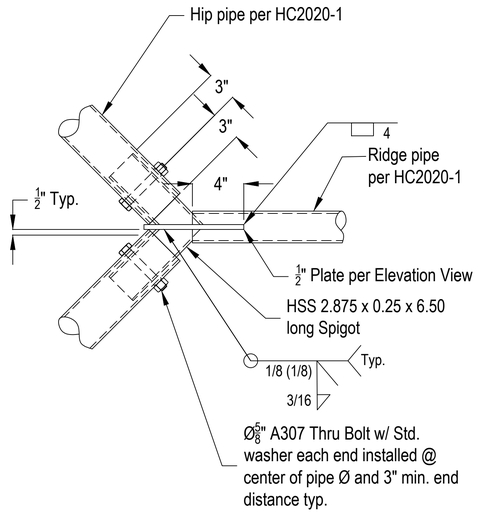


Section View D-D



Plan View

Detail B Elevation View



Detail B Plan View

Scale: Not to Scale

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LICENSED ARCHITECT RONALD W. EDWARDS C 25192 REN 22-31-25 STATE OF CALIFORNIA

MANUFACTURER:

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

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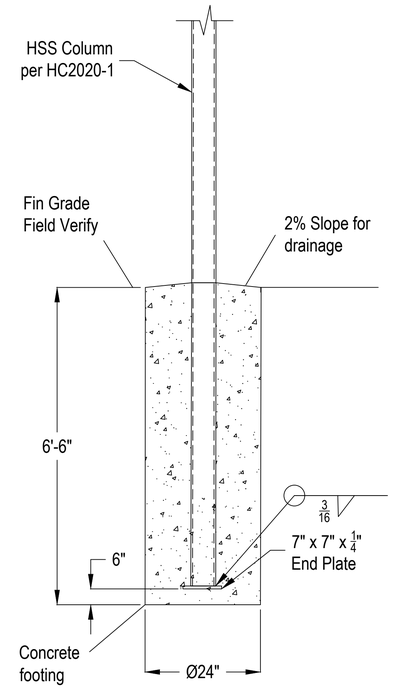
20'X20'X12' HIP CANOPY

Project # 22-037
Drawn By RWE
Date 12-20-22

HC2020-2

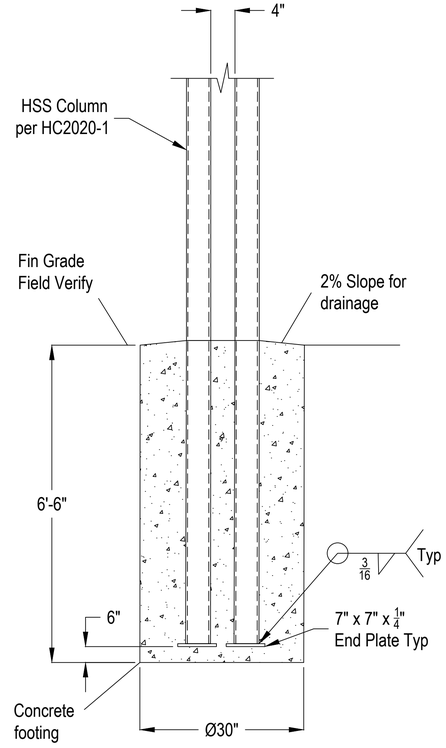
JAMES L. MITCHELL
REGISTERED PROFESSIONAL ENGINEER
S 3081
EXP. 6/30/2025
STRUCTURAL
STATE OF CALIFORNIA
2/16/24

Node No.		Support Forces P_x [kip]	P_y [kip]	P_z [kip]	Support Moments M_x [kipft]	M_y [kipft]	M_z [kipft]
	D	LC1 - Self-weight					
1		-0.012	0.080	-0.275	-0.75	-0.19	-0.15
3		0.012	0.080	-0.275	-0.75	0.19	0.15
5		-0.012	-0.080	-0.275	0.75	-0.19	0.15
7		0.012	-0.080	-0.275	0.75	0.19	-0.15
	Tv	LC2 - Prestress					
1		0.022	0.099	0.000	-0.82	-0.01	-0.14
3		-0.022	0.099	0.000	-0.82	0.01	0.14
5		0.022	-0.099	0.000	0.82	-0.01	0.14
7		-0.022	-0.099	0.000	0.82	0.01	-0.14
	L	LC3 - Live					
1		0.011	0.171	-0.432	-1.58	-0.12	-0.29
3		-0.011	0.171	-0.432	-1.58	0.12	0.29
5		0.011	-0.171	-0.432	1.58	-0.12	0.29
7		-0.011	-0.171	-0.432	1.58	0.12	-0.29
	W	LC4 - Wind 1					
1		0.481	0.887	0.278	-6.04	2.43	-0.48
3		-0.481	0.887	0.278	-6.04	-2.43	0.48
5		0.720	-0.551	1.079	3.85	4.25	-0.01
7		-0.720	-0.551	1.079	3.85	-4.25	0.01
	W	LC5 - Wind 2					
1		0.266	0.778	0.853	-5.75	1.10	-0.56
3		-0.602	0.585	-0.226	-4.35	-3.31	0.36
5		0.266	-0.777	0.853	5.75	1.10	0.56
7		-0.602	-0.585	-0.225	4.35	-3.31	-0.36
	S	LC6 - Snow					
1		0.011	0.171	-0.432	-1.58	-0.12	-0.29
3		-0.011	0.171	-0.432	-1.58	0.12	0.29
5		0.011	-0.171	-0.432	1.58	-0.12	0.29
7		-0.011	-0.171	-0.432	1.58	0.12	-0.29



NOTE: This detail shall not be used on Double Post Option

Detail C1
Embedded Single Post Option



Detail C2
Embedded Double Post Option

Scale: Not To Scale

FNAME
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RENEWAL 12-31-2025
STATE OF CALIFORNIA

MANUFACTURER:

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11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

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DATE: 04/12/2024

20'X20'X12'
HIP CANOPY

Project # 22-037
Drawn By RWE
Date 12-20-22

HC2020-3

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	**School Name:**	**School District:**
01-121121	LUCHA Elementary School	Alum Rock Unified School
DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	S3. DRIVEN DEEP FOUNDATIONS (PILES):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify pile materials, sizes and lengths comply with the requirements.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**b.** Determine capacities of test piles and conduct additional load tests as required.	**Test**	**LOR***	* Under the supervision of the geotechnical engineer.
☐	**c.** Inspect driving operations and maintain complete and accurate records for each pile.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**d.** Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**e.** Steel piles.	Provide tests and inspections per STEEL section below.		
☐	**f.** Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
☐	**g.** For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Note**
☐	**a.** Inspect drilling operations and maintain complete and accurate records for each pier.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	**School Name:**	**School District:**
01-121121	LUCHA Elementary School	Alum Rock Unified School
DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	Test or Special Inspection	**Type**	**Performed By**	**Code References and Note**
☐	**b.** Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	**c.** Confirm adequate end strata bearing capacity.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	**d.** Concrete piers.	Provide tests and inspections per CONCRETE section below.		

	S5. RETAINING WALLS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Placement, compaction and inspection of backfill.	**Continuous**	**GE***	**1705A.6.1.** * By geotechnical engineer or his or her qualified representative. (See section S2 above).
☐	**b.** Placement of soil reinforcement and/or drainage devices.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**c.** Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. See DSA IR 18-2.
☐	**d.** Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☐	**e.** Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	**School Name:**	**School District:**
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DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	S6. OTHER SOILS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Soil Improvements	**Test**	**GE***	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS (California Geological Survey) for final acceptance. * By geotechnical engineer or his or her qualified representative.
☐	**b.** Inspection of Soil Improvements	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**c.**			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13

Application Number:	**School Name:**	**School District:**
01-121121	LUCHA Elementary School	Alum Rock Unified School
DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify use of required design mix.	**Continuous**	**SI**	**Table 1705A.3 Item 5, 1910A.1.**
☑	**b.** Identifiy, sample, and test reinforcing steel.	**Test**	**LOR**	**1910A.2;** ACI 318-19 Ch.20 and Section 26.6.1.2; DSA IR 17-10. (See Appendix (end of this form) for exemptions.)
☑	**c.** During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	**Test**	**LOR**	**Table 1705A.3 Item 6**; ACI 318-19 Sections 26.5 & 26.12.
☑	**d.** Test concrete (f'_c).	**Test**	**LOR**	**1905A.1.17;** ACI 318-19 Section 26.12.
☑	**e.** Batch plant inspection:	**See Notes**	**SI**	Default of **'Continuous'** per **1705A.3.3**. If approved by DSA, batch plant inspection may be reduced to **'Periodic'** subject to requirements in Section **1705A.3.3.1,** or not required per **1705A.3.3.2.** See IR 17-13. (See Appendix (end of this form) for exemptions.)
☐	**f.** Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.		

	C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Sample and test prestressing tendons and anchorages.	**Test**	**LOR**	**1705A.3.4, 1910A.3**
☐	**b.** Inspect placement of prestressing tendons.	**Periodic**	**SI**	**1705A.3.4, Table 1705A.3 Items 1 & 9.**

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	**c.** Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	**Periodic**	**SI**	**Table 1705A.3 Item 13.** Special inspector to verify specified concrete strength test prior to stressing.
☐	**d.** Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	**Continuous**	**SI**	**1705A.3.4, Table 1705A.3 Item 9;** ACI 318-19 Section 26.13

	C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect fabrication of precast concrete members.	**Continuous**	**SI**	ACI 318-19 Section 26.13, and PCI MNL-128 and -130.
☐	**b.** Inspect erection of precast concrete members.	**Periodic**	**SI***	**Table 1705A.3 Item 10.** * May be performed by PI when specifically approved by DSA.
☐	**c.** For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	**Continuous**	**SI**	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
☐	**d.** Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	**Periodic**	**SI**	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13

Application Number:	**School Name:**	**School District:**
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DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	C4. SHOTCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect shotcrete placement for proper application techniques.	**Continuous**	**SI**	**1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3.** See ACI 506.2-13 Section 3.4, ACI 506R-16.
☐	**b.** Sample and test shotcrete (f'_c).	**Test**	**LOR**	**1908A.2, 1705A.3.9**

	C5. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect installation of post-installed anchors	**See Notes**	**SI***	**1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8** (See Appendix (end of this form) for exemptions). ACI 318-19 Section 26.13. * May be performed by the project inspector when specifically approved by DSA.
☐	**b.** Test post-installed anchors.	**Test**	**LOR**	**1910A.5.** (See Appendix (end of this form) for exemptions.)

	C6. OTHER CONCRETE:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.**			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number:	**School Name:**	**School District:**
01-121121	LUCHA Elementary School	Alum Rock Unified School
DSA File Number:	**Increment Number:**	**Date Created:**
43-04		2024-06-25 11:14:51

	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. •Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1**;** AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
☐	**e.** Buckling restrained braces.	**Test**	**LOR**	Testing and special inspections in accordance with IR 22-4.

	S/A2. HIGH-STRENGTH BOLTS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	**Periodic**	**SI**	**Table 1705A.2.1 Items 1a & 1b, 2202A.1;** AISC 360-16 Section A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-8 & DSA IR 17-9.
☐	**b.** Test high-strength bolts, nuts and washers.	**Test**	**LOR**	**Table 1705A.2.1 Item 1c, 2213A.1**; RCSC 2014 Section 7.2; DSA IR 17-8.
☐	**c.** Bearing-type ("snug tight") connections.	**Periodic**	**SI**	**Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2**; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
☐	**d.** Pretensioned and slip-critical connections.	*	**SI**	**Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2;** AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. *"Continuous" or "Periodic" depends on the tightening method used.

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5**; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	b. Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.

	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	**d.** Verification of reinforcing steel weldability other than ASTM A706.	**Periodic**	**SI**	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	**e.** Inspect welding of reinforcing steel.	**Continuous**	**SI**	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	b. Inspect single-pass fillet welds ≤ 5/16".	**Periodic**	**SI**	**Table 1705A.2.1 Item 5a.5;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	**c.** Inspect end-welded studs (ASTM A-108) installation (including bend test).	**Periodic**	**SI**	**2213A.2**; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	**d.** Inspect floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Item 5a.6;** AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	**e.** Inspect welding of structural cold-formed steel.	**Periodic**	**SI***	**1705A.2.5; AWS D1.3; DSA IR 17-3.** The quality control provisions of AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	**f.** Inspect welding of stairs and railing systems.	**Periodic**	**SI***	**1705A.2.1;** AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	**g.** Verification of reinforcing steel weldability.	**Periodic**	**SI**	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	**h.** Inspect welding of reinforcing steel.	**Continuous**	**SI**	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	**c.**	**Test**	**LOR**	

	S/A7. STEEL JOISTS AND TRUSSES:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	**Continuous**	**SI**	**1705A.2.3, Table 1705A.2.3;** AWS D1.1; DSA IR 22-3 for steel joists only. **1705A.2.4;** AWS D1.3 for cold-formed steel trusses.

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	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A8. SPRAYED FIRE-RESISTANT MATERIALS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	**Periodic**	**SI**	**1705A.15, 1705A.15.1, 1705A.15.2, 1705A.15.3, 1705A.15.4, 1705A.15.5, 1705A.15.6.**
☐	**b.** Test density.	**Test**	**LOR**	**1705A.15.1, 1705A.15.5, ASTM E605**
☐	**c.** Bond strength adhesion/cohesion.	**Test**	**LOR**	**1705A.15.1, 1705A.15.6, ASTM E736**

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Anchor Bolts and Anchor Rods	**Test**	**LOR**	Identify, sample and test anchor bolts and anchor rods **not** meeting exemptions identified in Section 1 of IR 17-11.
☐	**b.** Threaded rod not used for foundation anchorage.	**Test**	**LOR**	Identify, sample and test threaded rods **not** meeting exemptions identified in Section 1 of IR 17-11.

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A10. STORAGE RACK SYSTEMS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	**Periodic**	**SI**	Table 1705A.13.7
☐	**b.** Fabricated storage rack elements.	**Periodic**	**SI**	1704A.2.5; Table 1705A.13.7

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	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**c.** Storage rack anchorage installation.	**Periodic**	**SI**	ANSI/MH16.1 Section 7.3.2; Table 1705A.13.7
☐	**d.** Completed storage rack system to indicate compliance with the approved construction documents.	**Periodic**	**SI***	Table 1705A.13.7; * May be preformed by the project inspector when specifically approved by DSA.

	S/A11. Other Steel			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.**			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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Exempt items given in DSA IR A-22 or the 2022 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests **/** special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill with depth not exceeding 12".

	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☑	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition shown in Appendix A of IR 21-1.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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	CONCRETE/MASONRY:
☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

	WELDING:
☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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	WELDING:
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

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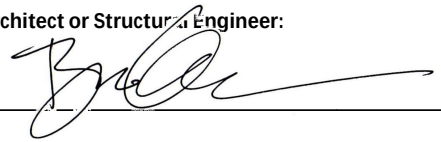
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Name of Architect or Engineer in general responsible charge:

BRIAN P. WHITMORE

Name of Structural Engineer (When structural design has been delegated):

Signature of Architect or Structural Engineer:



Date: 02.23.2024

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121121 INC:
REVIEWED FOR
SS ☑ FLS ☐ ACS ☐
DATE: 7/8/2024

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

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1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293

2. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

Geotechnical Evaluation and Geologic Hazards Assessment

L.U.C.H.A Elementary School

1711 East San Antonio Street

San Jose, California

Alum Rock Union School District

2930 Gay Avenue | San Jose, California 95127

May 10, 2024 | Project No. 404695001



Geotechnical | Environmental | Construction Inspection & Testing | Forensic Engineering & Expert Witness

Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

35+ YEARS

Geotechnical Evaluation and Geologic Hazards Assessment

L.U.C.H.A Elementary School

1711 East San Antonio Street

San Jose, California

Mr. Mark Freitas
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May 10, 2024 | Project No. 404695001

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E – Geophysical Survey
F – Calculations

1 INTRODUCTION

In accordance with your authorization, we have performed a Geotechnical Evaluation and Geologic Hazards Assessment, based on our proposal dated September 18, 2023, for the proposed new play structures at Learning in an Urban Community with High Achievement (L.U.C.H.A) Elementary School located at 1711 East San Antonio Street in San Jose, California (Figure 1). The work was performed to evaluate the subsurface conditions at site and to assess the potential impact of regional geologic and seismic hazards on the project. This report presents the findings and conclusions from our subsurface evaluation and geologic hazards assessment, and our geotechnical recommendations for design and construction of the proposed improvements.

2 SCOPE OF SERVICES

Our scope of services included the following:

- Reviewed readily available geologic and seismic literature pertinent to the project area, including geologic maps and reports, regional fault maps, seismic hazard maps and aerial photography.
- Performed a site reconnaissance to observe the general site conditions, and to mark the locations for our subsurface exploration.
- Obtained a boring permit from Valley Water formerly known as the Santa Clara Valley Water District.
- Coordinated with Underground Service Alert (USA) to locate underground utilities in the vicinity of our subsurface exploration.
- Conducted a subsurface exploration consisting of two shallow hand-auger borings drilled to depths of approximately 5 feet and 26½ feet below existing ground surface (bgs); and one cone penetration test (CPT) sounding pushed to a depth of approximately 50½ feet bgs. A representative of Ninyo & Moore logged the subsurface conditions exposed in the borings, and collected bulk and relatively undisturbed samples for laboratory testing. CPT cone tip resistance and sleeve friction were electronically measured and recorded at vertical intervals of approximately 2 inches to evaluate the soil behavior index of the subsurface materials. The borings and sounding were backfilled with Portland cement grout shortly after drilling.
- Performed a geophysical survey utilizing the Refraction Microtremor (ReMi) technique to evaluate the variation of seismic shear wave velocities with depth and seismic site classification.
- Performed laboratory testing on select samples to evaluate in-situ soil moisture content, gradation analysis, Atterberg limits and soil corrosivity.
- Performed a geologic hazards assessment consistent with the Note 48 Checklist for Review of Engineering Geology and Seismology Report for California Public Schools, Hospitals, and Essential Services Buildings (CGS, 2022).

- Compiled the findings from our background review and performed engineering analysis on the field and laboratory data.
- Prepared this geotechnical report presenting our findings and conclusions from our evaluation, and our geotechnical recommendations for proposed improvements.

3 SITE DESCRIPTION

Based on our conversations with you, we understand that the proposed project consists of the construction of a new play structure. The proposed play structure is to be located in an undeveloped grass field immediately north of the blacktop play area in the LUCHA Elementary School schoolyard. The school is located on the north side of East San Antonio Street, between South King Road and McCreery Avenue. The school is bound by an access road and single-family residential development to the east, San Antonio Elementary School to the north, and the entrance to San Antonio Elementary School and commercial development to the west. The site is relatively flat, having a ground surface elevation ranging from approximately 96 feet (in the west corner) above mean sea level (MSL) to about 99 feet in the east corner[1]. The location of the proposed play structure (Figure 2) will be approximately 37.3518° north latitude and 121.8524° west longitude.

4 FIELD EXPLORATION AND LABORATORY TESTING

As previously stated, the field exploration for this study consisted of a field reconnaissance, one cone penetration test sounding, two hand auger borings, one exploratory boring and one geophysical survey. The field reconnaissance and the geophysical survey were performed on October 25, 2023. The hand auger borings and the CPT sounding were performed on November 2, 2023. The exploratory boring was performed on April 10, 2024. The approximate locations of the borings, cone penetration test and geophysical survey are presented on Figure 2. Prior to commencing the subsurface exploration, Underground Service Alert was notified for field marking of the existing utilities. The borings and sounding were backfilled with neat cement grout shortly after drilling.

4.1 Hand Auger Borings

Two hand auger borings were advanced to a depth of approximately 5 feet below ground surface with a 3-inch OD (outside-diameter) hand auger. A representative of Ninyo & Moore logged the subsurface conditions exposed in the borings and collected bulk soil samples. The samples were

[1] United State Geological Survey, “3D Elevation Program”, accessed December 7, 2023, https://apps.nationalmap.gov/3depdem/

then transported to our geotechnical laboratory for testing. The borings were backfilled with neat cement grout after completion of drilling. Descriptions of the subsurface materials encountered are presented in the subsequent sections. Detailed boring logs and sampling procedures are presented in Appendix B.

4.2 Exploratory Boring

Ninyo & Moore retained California Geotech to perform one small-diameter auger boring to a depth of 26½ feet below the existing ground surface (bgs) using a truck-mounted drill rig with 4-inch-diameter, solid-stem augers. A representative of Ninyo & Moore logged the subsurface conditions exposed in the boring and collected relatively undisturbed soil samples. The samples were then transported to our geotechnical laboratory for testing. The boring was backfilled with neat cement grout after completion of drilling. Descriptions of the subsurface materials encountered are presented in the subsequent sections. Detailed boring logs and sampling procedures are presented in Appendix B.

4.3 Cone Penetration Testing

Ninyo & Moore retained Middle Earth Geo Testing to perform the cone penetration testing. One of the previously discussed hand auger borings was performed at the CPT location to further clear and locate any utilities. We then advanced the CPT to the approximate designed depth of 50 feet bgs using a truck-mounted rig with 20-ton reaction capacity. Tip resistance, sleeve friction, and pore water pressure data were collected and recorded electronically at intervals of approximately 2 inches while the cone was advanced. The tip resistance and sleeve friction were used to evaluate the soil behavior type (Robertson, 1986). The CPT data, and the interpreted soil behavior types are presented on the logs in Appendix A.

4.4 Laboratory Testing

Laboratory testing of samples collected during the subsurface exploration included tests to evaluate in-situ soil moisture content, gradation, Atterberg limits and soil corrosivity. One soil sample was submitted to CERCO Analytical for corrosivity evaluation. The results of the in-situ moisture test is presented on the boring logs in Appendix B. The results of the other laboratory tests are presented in Appendix C (Ninyo & Moore) and D (CERCO).

4.5 Geophysical Survey

On October 25, 2023, Ninyo & Moore performed a geophysical survey at the site using the refraction microtremor (ReMi) method to evaluate the characteristic shear wave velocity at the site to a depth of 100 feet below the ground surface (V_{s100}) for seismic site classification. The

survey consisted of collecting microtremor array measurements (MAM) from surface waves using ambient noise as a passive source and an array of geophones along one seismic line. The survey line location is illustrated on Figure 2. The survey results are provided in Appendix E along with a description of the survey procedure.

5 GEOLOGIC AND SUBSURFACE CONDITIONS

Our findings regarding regional geologic setting, site geology, subsurface stratigraphy, and groundwater conditions at the subject site are provided in the following sections.

5.1 Regional Geologic Setting

The subject site is located in the northeastern portion of the Santa Clara Valley in the Coast Ranges geomorphic province of California. The Coast Ranges are comprised of several mountain ranges and structural valleys formed by tectonic processes commonly found around the Circum-Pacific belt. Basement rocks have been sheared, faulted, metamorphosed, and uplifted, and are separated by thick blankets of Cretaceous and Cenozoic sediments that fill structural valleys and line continental margins. The San Francisco Bay Area has several ranges that trend northwest, parallel to major strike-slip faults such as the San Andreas, Hayward, and Calaveras (Figure 3). Major tectonic activity associated with these and other faults within this regional tectonic framework consists primarily of right-lateral, strike-slip movement.

5.2 Site Geology

Regional geologic mapping by Helley et al. (1994) indicates that the site is underlain by Holocene-age natural levee deposits. Helley and Wesling (1990) describe these deposits as typically consisting of “loose, moderate- to well-sorted sandy or clayey silt grading to sandy or silty clay,” and generally well drained. A map of the regional geology is presented in Figure 4.

5.3 Subsurface Conditions

The following sections provide a generalized description of the geologic units encountered during our subsurface evaluation below the pavement section. More detailed descriptions are presented on the logs in Appendix B.

5.3.1 Fill

Fill was encountered in the borings at the ground surface to depths of between ½ and 3 feet. Fill, as encountered, consisted of light gray to gray, dry, medium dense to dense, well-graded gravel.

5.3.2 Natural Levee Deposits (Alluvium)

We encountered natural levee deposits (alluvium) underlying the fill in our borings. These deposits consisted of light brown to brown, moist, very loose to medium dense, clayey sand and silty sand with variable amounts of silt and gravel; and dark brown to brown, moist, soft to stiff, sandy lean clay with variable amounts of silt.

5.4 Groundwater

During our exploration, groundwater was estimated at a depth of 6 feet bgs in our CPT sounding and at a depth of 10 feet in the exploratory boring. Groundwater may rise to a higher elevation than was encountered during our exploration due to the short time available for seepage of water into the borings. Regional groundwater records in the seismic hazard zone report for the San Jose East 7.5-minute quadrangle prepared by the California Geological Survey (CGS, 2000), indicate that the historic high groundwater level at the sites is approximately 10 feet below the ground surface.

Fluctuations in the groundwater level may occur due to seasonal precipitation, variations in topography or subsurface hydrogeologic conditions, or as a result of changes to nearby irrigation practices or groundwater pumping. In addition, seeps may be encountered at elevations above the historic high groundwater levels due to perched groundwater conditions, leaking pipes, preferential drainage, or other factors not evident at the time of our exploration.

6 GEOLOGIC HAZARDS AND CONSIDERATIONS

This study considered a number of considerations relevant to the proposed construction, including dynamic settlement, expansive soils, and soil corrosivity. These considerations are discussed in the following subsections.

6.1 Seismic Hazards

The site is located in a seismically active area in Northern California. Seismic hazards caused by earthquakes that may impact the site include ground rupture due to faulting, ground shaking, liquefaction and related phenomenon. These potential hazards are discussed in the following subsections.

6.1.1 Surface Ground Rupture and Faulting

LUCHA Elementary is not located within a Fault-Rupture Hazard Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. The closest Holocene-age fault to the site is the Hayward Fault, located approximately 8.9 miles to the northeast. As defined by the California

Geologic Survey (CGS, 2018), active faults are faults that have caused surface displacement within Holocene time or within approximately the last 11,700 years (CGS, 2018) (Figure 3).

Using the deaggregations calculated by the United States Geological Survey (USGS) Unified Hazard Tool, we evaluated the distance to nearby fault zones and the associated maximum credible earthquake associated with each. Faults with a 10% or higher contribution are listed in Table 1.

Table 1 – Principal Active Faults

Fault	Approximate Fault-to-Site Distance	Maximum Credible Earthquake (MCE)
	Miles (Kilometers)	Magnitude
UC33brAvg_FM31 Hayward (So) [0]	4.29 (6.90)	7.05
UC33brAvg_FM31 Calaveras (Central) [8]	5.38 (8.66)	7.20
UC33brAvg_FM32 Hayward (So) [0]	4.29 (6.90)	7.06
UC33brAvg_FM31 Calaveras (Central) [8]	5.38 (8.66)	7.20

Based on our review of the referenced seismic hazard and geologic maps, known active faults are not mapped on the site, and the site is not located within a fault-rupture hazard zone. Therefore, the probability of damage from surface fault rupture is considered to be low.

6.1.2 Historical Seismicity

Although the site is not located within a State of California Earthquake Fault Zone, the San Francisco Bay Area is considered seismically active due to the presence of multiple active faults in the region. Numerous small earthquakes occur every year in the region and large (greater than Moment Magnitude 7) earthquakes have occurred in the past, and can be expected to occur in the future. Figure 3 shows the approximate locations of the epicenters of major earthquakes in the region. The following table (Table 2) summarizes historical seismic events in the region based on a search of the USGS Earthquake catalog for events since 1900 with a magnitude ≥ 4.5 and located within an 80-kilometer radius of the site.

Table 2 – Summary of Historical Seismicity				
Event ID	Date	Magnitude	Distance from Site	
			Kilometers	Miles
15 km SW of Westley, CA	09/19/2023	4.5	50.10	31.14
15km ESE of Alum Rock, CA	10/25/2022	5.1	16.57	10.30
9 km SSE of San Juan Bautista, California	01/12/2011	4.5	71.88	44.67
6 km NNE of East Foothills, California	10/31/2007	5.5	11.41	7.09
5 km SSW of Gilroy, California	05/14/2002	4.9	48.37	30.06
10 km SW of Ridgemark, California	08/12/1998	5.1	74.93	46.57
8 km ESE of East Foothills, California	05/21/1996	4.7	11.53	7.16
2 km E of Aromas, California	04/19/1996	4.9	56.03	34.82
14 km ESE of Alum Rock, California	08/11/1993	4.7	15.96	9.92
9 km E of Gilroy, California	01/16/1993	4.9	50.63	31.47
1 km NNE of Interlaken, California	03/24/1991	4.6	44.43	27.61
4 km E of Interlaken, California	04/18/1990	5.1	46.16	28.69
5 km NNW of Aromas, California	04/18/1990	5.4	49.76	30.93
4 km NNW of Aromas, California	04/18/1990	4.9	49.94	31.04
4 km N of Aromas, California	04/18/1990	4.7	50.71	31.52
6 km NE of Day Valley, California	11/02/1989	4.7	31.65	19.67
7 km NE of Day Valley, California	10/25/1989	4.7	29.55	18.37
4 km NW of Day Valley, California	10/21/1989	4.7	31.85	19.79
2 km NNE of Day Valley, California	10/21/1989	4.5	32.91	20.45
1 km N of Aptos Hills-Larkin Valley, California	10/19/1989	4.6	42.17	26.21
5 km E of Interlaken, California	10/19/1989	4.5	47.91	29.78
6 km ENE of Corralitos, California	10/18/1989	4.5	37.84	23.52
7 km SW of Monte Sereno, California	10/18/1989	5.1	25.20	15.66
7 km NNE of Corralitos, California	10/18/1989	4.8	33.91	21.08
1 km NNW of Lexington Hills, California	10/18/1989	4.6	22.49	13.98
4 km N of Interlaken, California	10/18/1989	4.7	41.63	25.87
2 km SSW of Cambrian Park, California	10/18/1989	4.7	15.03	9.34
Loma Prieta, California Earthquake	10/18/1989	6.9	35.18	21.87
2 km E of Lexington Hills, California	08/08/1989	4.5	22.86	14.21
4 km ESE of Lexington Hills, California	08/08/1989	5.4	23.58	14.66
6 km NE of East Foothills, California	04/03/1989	4.5	11.42	7.10
7 km E of East Foothills, California	11/10/1988	4.8	11.10	6.90
8 km ESE of Lexington Hills, California	06/27/1988	5.3	25.13	15.62
6 km E of East Foothills, California	06/13/1988	5.3	10.80	6.71

Table 2 – Summary of Historical Seismicity				
Event ID	Date	Magnitude	Distance from Site	
			Kilometers	Miles
1 km NE of Tres Pinos, California	02/20/1988	5.1	78.28	48.65
15 km NE of East Foothills, California	03/31/1986	5.7	20.37	12.66
3 km ENE of Tres Pinos, California	01/26/1986	5.5	78.99	49.09
14 km E of Seven Trees, California	04/24/1984	6.2	16.05	9.97
8 km NE of Corralitos, California	08/18/1982	4.5	36.88	22.92
7 km E of East Foothills, California	01/15/1981	4.8	11.21	6.97
2 km SE of Aromas, California	01/07/1981	4.5	57.16	35.53
7 km SSE of San Juan Bautista, California	04/13/1980	4.7	69.94	43.47
9 km NE of Livermore, California	01/27/1980	5.4	46.01	28.59
10 km SW of Brentwood, California	01/25/1980	4.6	57.79	35.91
11 km E of Blackhawk, California	01/24/1980	4.8	54.00	33.56
11 km E of Blackhawk, California	01/24/1980	5.1	51.51	32.02
8 km ENE of Blackhawk, California	01/24/1980	5.8	55.72	34.63
8 km ENE of San Martin, California	08/06/1979	5.8	40.83	25.37
15 km E of Seven Trees, California	05/08/1979	4.8	17.95	11.16
9 km NW of Hollister, California	11/28/1974	5.2	58.90	36.60
10 km NE of Morgan Hill, California	10/03/1973	4.6	30.11	18.71
5 km S of San Juan Bautista, California	10/03/1972	4.9	67.58	42.00
23 km S of Davenport, California	04/16/1971	4.8	68.01	42.27
21 km SSW of Santa Cruz, California	03/09/1971	4.8	66.62	41.41
3 km SW of Blackhawk, California	06/12/1970	4.6	50.56	31.42
2 km NW of Hollister, California	03/31/1970	4.5	66.17	41.12
2 km W of Corralitos, California	12/18/1967	5.3	40.14	24.95
11 km NNE of Morgan Hill, California	09/28/1967	4.9	24.62	15.30
1 km WNW of Antioch, California	09/10/1965	4.9	73.23	45.52
7 km WSW of San Martin, California	11/16/1964	5.2	35.93	22.33
4 km E of Aromas, California	09/14/1963	5.4	56.12	34.88
0 km W of Loma Mar, California	05/22/1963	4.6	42.12	26.18
6 km WSW of Ridgemark, California	01/20/1960	5.0	73.38	45.61
Central California	12/29/1959	4.7	59.97	37.27
5 km NE of Salinas, California	05/26/1959	4.6	73.61	45.75
3 km SW of Gilroy, California	03/02/1959	5.3	46.71	29.03
7 km WNW of Broadmoor, California	12/11/1958	4.7	73.96	45.97
17km E of Gilroy, CA	09/21/1958	4.6	55.02	34.20

Table 2 – Summary of Historical Seismicity				
Event ID	Date	Magnitude	Distance from Site	
			Kilometers	Miles
7 km NNW of Boulder Creek, California	09/05/1955	5.8	31.59	19.63
2 km ESE of San Leandro, California	12/17/1954	4.5	47.55	29.55
4 km ESE of Interlaken, California	04/25/1954	5.3	48.93	30.41
5 km NNW of Hollister, California	10/31/1951	4.8	63.36	39.38
2 km ENE of Aromas, California	01/01/1949	4.5	54.30	33.75
2 km W of San Juan Bautista, California	03/28/1948	4.5	61.16	38.01
2 km W of San Juan Bautista, California	03/28/1948	4.6	61.16	38.01
Central California	05/29/1946	4.5	75.21	46.75
0 km NNW of Ridgemark, California	05/17/1945	4.6	72.99	45.36
10 km WSW of Morgan Hill, California	05/28/1941	4.5	31.55	19.61
5 km ESE of Las Lomas, California	07/17/1939	4.5	57.85	35.96
7 km SW of Hollister, California	06/24/1939	5.5	70.99	44.12
12 km NE of Milpitas, California	12/01/1938	4.5	17.12	10.64
2 km ESE of Pasatiempo, California	02/12/1938	4.5	41.25	25.63
3 km SE of Piedmont, California	03/08/1937	4.5	58.50	36.36
2 km W of Boronda, California	03/05/1937	4.5	73.73	45.82
3 km SW of Los Gatos, California	12/13/1933	5.0	21.34	13.26
1 km ENE of Union City, California	05/16/1933	4.5	30.52	18.97
5 km NW of Boulder Creek, California	11/03/1932	4.9	34.58	21.49
5km S of Opal Cliffs, CA	10/25/1932	4.6	49.40	30.70
5 km WSW of Saratoga, California	06/14/1932	4.5	23.10	14.35
6 km SE of San Juan Bautista, California	01/09/1930	4.5	68.86	42.80
6 km SE of San Juan Bautista, California	01/09/1930	4.5	68.86	42.80
1 km NNW of Buena Vista, California	08/09/1928	4.8	6.45	4.01
1 km WSW of Gilroy, California	01/09/1928	4.6	45.96	28.57
9 km SW of Davenport, California	02/15/1927	5.0	57.85	35.95
1 km WNW of Davenport, California	10/24/1926	5.5	48.77	30.31
16 km SW of Davenport, California	10/22/1926	6.3	64.33	39.98
22 km S of Davenport, California	10/22/1926	6.4	68.08	42.31
14 km ESE of East Foothills, California	04/03/1924	4.5	16.31	10.13
5 km NNE of Day Valley, California	11/25/1919	4.5	30.29	18.82
2 km NE of East Foothills, California	10/26/1917	4.8	7.08	4.40
2 km ESE of Pasatiempo, California	08/08/1916	5.0	41.25	25.63
1 km WNW of Piedmont, California	10/08/1915	4.5	63.68	39.57

Table 2 – Summary of Historical Seismicity				
Event ID	Date	Magnitude	Distance from Site	
			Kilometers	Miles
6 km NW of Boulder Creek, California	12/28/1914	4.5	34.62	21.52
2 km WNW of Lexington Hills, California	11/09/1914	4.7	24.07	14.96
6 km SSW of Los Altos Hills, California	09/12/1912	4.5	28.18	17.52
2 km SE of Morgan Hill, California	07/01/1911	6.5	32.87	20.43
2 km SSW of Hollister, California	03/11/1911	4.5	69.55	43.23
2 km SSW of Hollister, California	12/31/1910	5.0	69.55	43.23
4 km WSW of Watsonville, California	03/11/1910	5.8	50.45	31.36
The 1906 San Francisco Earthquake	04/18/1906	7.9	75.78	47.10
3 km ENE of Seven Trees, California	08/03/1903	5.8	7.39	4.59
3 km S of Milpitas, California	06/11/1903	5.8	6.81	4.23
Near Aromas, California	04/30/1900	4.5	55.00	34.18

6.1.3 Site-Specific Ground Motion and Site Classification

Considering the proximity of the sites to historic and Holocene active faults (Figure 3), the potential for future strong seismic ground shaking at the site is significant. Seismic design criteria to address ground shaking are provided in Section 8.1. The peak ground acceleration (PGA) associated with the Maximum Considered Earthquake Geometric Mean (MCE_G) was calculated in accordance with the American Society of Civil Engineers (ASCE) 7-16 Standard and the 2022 California Building Code (CBC).

The MCE_G peak ground acceleration with adjustment for site class effects (PGA_M) was calculated as 0.758g using the seismic design tool developed by the Structural Engineers Association of California in conjunction with the Office of Statewide Health Planning and Development (SEAOC & OSHPD, 2023). The calculated PGA_M is based a mapped MCE_G peak ground acceleration of 0.689g for the site and a site coefficient (F_{PGA}) of 1.1 for Site Class D. Site Class D was selected based on results from our refraction microtremor (ReMi) survey at the site (Appendix E) that computed an interval-weighted, harmonic-mean shear wave velocity 726 feet per second to a depth of 100 feet (V_{s100}) that is approximately equivalent to a V_{s30} of 221 meters per second.

A ground motion hazard analysis is not required where the value of the parameter S_{M1}, as determined by Eq. (11.4-2) is increased by 50% for all applications of S_{M1}Suppl 2 in this

Standard. The resulting value of the parameter S_{D1} determined by Eq. (11.4-4) shall be used for all applications of S_{D1} in this Standard.

6.1.4 Liquefaction and Strain Softening

The strong vibratory motions generated by earthquakes can trigger a rapid loss of shear strength in saturated, loose, granular soils of low plasticity (liquefaction) or in wet, sensitive, cohesive soils (strain softening). Liquefaction and strain softening can result in a loss of foundation bearing capacity, or lateral spreading of sloping or unconfined ground. Liquefaction can also generate sand boils which leads to subsidence at the ground surface. Liquefaction (or strain softening) is generally not a concern at depths more than 50 feet below ground surface.

The site is located within a Liquefaction Hazard Zone, as established by the California Geological Survey. The CPT sounding encountered groundwater at a depth of 6 feet bgs and the exploratory boring encountered groundwater at a depth of 10 feet bgs. We encountered primarily cohesive soils below the groundwater level. Relatively thin layers of potentially liquefiable silty sand were encountered below the groundwater level.

We evaluated the potential for liquefaction in accordance with the methods presented by Boulanger and Idriss (2014) using the CPT data collected during our subsurface exploration and the computer program CLiq (GeoLogismiki, 2018). Our analysis assumed a design groundwater level of 6 feet below the ground surface, and considered a seismic event producing a PGA of 0.76g resulting from a Magnitude 7.6 earthquake. The results of our analysis indicate that relatively thin layers of sandy and silty soil below the assumed design groundwater level will liquefy under the considered ground motion based on a factor of safety against liquefaction of less than one. Due to the depth and relative thickness of the liquefiable layers, we do not regard the potential for liquefaction-induced reduction in the bearing capacity of shallow foundations. to be a design concern or considerations for the project. As discussed in more detail below, sand-boil-induced ground subsidence and lateral spreading are not design concerns or considerations for the project. Although reduction or loss of bearing capacity for shallow foundations, subsidence associated with ground rupture and lateral spreading are not concerns, strong shaking of the site and the occurrence of liquefaction can result in settlement as discussed below under Dynamic Settlement.

The moisture content of the clay encountered during our subsurface exploration, when compared to the liquid limit and plastic limit from the results of our laboratory testing, is not consistent with a soil that is particularly sensitive.

Estimates of undrained and remolded shear strength based on CPT tip resistance and sleeve friction indicate that the cohesive soils during our subsurface exploration are not particularly sensitive. As such, we do not regard seismically induced strain-softening behavior to be a design consideration or concern for this project.

6.1.5 Dynamic Settlement

The strong vibratory motion associated with earthquakes can dynamically compact or densify loose granular soil, leading to surficial settlements. Dynamic settlement may occur in both dry and saturated sand and silt. Cohesive soil is not typically susceptible to dynamic settlement. Based on the density of the near surface sands encountered during our field investigation, dry sand dynamic settlement is anticipated to be negligible.

We evaluated the potential for dynamic settlement using the computer program CLiq (GeoLogismiki, 2018) to evaluate the CPT data collected during our field investigation. CPT data was analyzed based on the methodology of Boulanger and Idriss (2014).

Our analysis considered a Magnitude 7.6 earthquake producing a PGA of 0.76g and a design groundwater elevation of 6 feet below the ground surface. The results of our analyses indicate that the total dynamic settlement at the site following the considered seismic event will be up to approximately 3/4 inch. Differential dynamic settlement is estimated to be about 1/2 inch over a horizontal distance of approximately 30 feet. The results of our analysis are presented in Appendix F.

6.1.6 Ground Subsidence

Sand boils that occur when liquefied, near-surface soil escapes to the ground surface, can result in ground subsidence due to a loss of material that is in addition to dynamic settlement. As discussed in previous sections, liquefaction potential is very low to low at the site. As such, we do not anticipate ground subsidence at the site.

6.1.7 Lateral Spread

In addition to vertical displacements, seismic ground shaking can induce horizontal displacements as surficial soil deposits spread laterally by floating atop liquefied subsurface layers. Lateral spread can occur on sloping ground or on flat ground adjacent to an exposed face. The nearest exposed slope face is Silver Creek, located approximately 1500 feet to the north of the site. Based on the site location and the low liquefaction susceptibility at the site, we do not anticipate that lateral spreading will occur following a significant seismic event.

6.1.8 Tsunamis and Seiches

Tsunamis are long wavelength seismic sea waves (long compared to ocean depth) generated by the sudden movements of the ocean floor during submarine earthquakes, landslides, or volcanic activity. The project location is not within a Tsunami Hazard Area as shown on the Tsunami Hazard Area Map (CGS, 2021). Seiches are waves generated in a large enclosed body of water. Based on the inland location of the site and considering that there are no large enclosed bodies of water nearby, the potential for damage due to tsunamis or seiches is not a design consideration.

6.1.9 Flooding and Inundation Due to Dam Failure

Our review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FEMA, 2009) found that the site is located in Zone X, an area of minimal flood hazard (Figure 7).

Properties located downstream of dams can be inundated with flood waters if the dams were to fail. Dam owners are required to prepare inundation maps showing the limits of flooding caused by dam failure. Our review of dam breach inundation maps on file with the Division of Safety of Dams at the California Department of Water Resources (DWR, 2023) indicates the site is outside of the inundation zones for nearby dams.

6.2 Static Settlement

We anticipate that the proposed improvements will be relatively light and that significant changes to the site grade are not proposed. We anticipate, therefore, that the total static settlement of drilled pier or spread footings foundations due to sustained loads will be less than 1 inch, provided the recommendations presented in this report are followed.

6.3 Corrosive/Deleterious Soil

Corrosivity analysis was performed by CERCO Analytical, Inc. of Concord, California on a sample of the near-surface soil. As reported by CERCO Analytical, the sample was determined to be “corrosive” based on resistivity measurements. CERCO Analytical’s report (see Appendix D) included the following recommendation: “All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.” Please refer to the CERCO Analytical report included in Appendix D for more information regarding their test results and brief evaluation.

6.4 Expansive Soil

Some clay minerals undergo volume changes upon wetting or drying. Unsaturated soil containing those minerals will shrink/swell with the removal/addition of water. The heaving pressures associated with this expansion can damage structures and flatwork. Based on the coarse-grained sandy nature of subsurface materials encountered in the upper 10 feet, expansive soil is not a design concern for this project.

7 CONCLUSIONS

Based on our review of the referenced background data, our site field reconnaissance, subsurface evaluation, and laboratory testing, it is our opinion that proposed construction is feasible from a geotechnical standpoint. Geotechnical considerations include the following:

- The subsurface exploration for this study encountered fill (medium dense to dense gravel) over natural levee deposits (very loose to medium dense clayey sand and silty sand; and soft to stiff sandy lean clay).
- Groundwater was encountered in the CPT sounding at a depth of 6 feet below the existing grade and at a depth of 10 feet in the exploratory boring. Variations in the groundwater level across the sites and over time should be anticipated as discussed in Section 5.4. The historic high groundwater level at the site, based on regional mapping (CGS, 2000), is approximately 10 feet below the ground surface.
- The site could experience a relatively large degree of ground shaking during a significant earthquake on a nearby fault. Seismic design criteria are presented in Section 8.1.
- The site is located within a liquefaction susceptible zone (Knudsen, 2000), however based on the results of our laboratory testing and our liquefaction analysis, we do not anticipate the potential for liquefaction-induced reduction in the bearing capacity of shallow foundations or drilled pier foundations, sand-boil-induced ground subsidence, or lateral spreading to be design constraints for the project.
- Static settlement should be tolerable for the proposed improvements provided that the proposed structures are supported on foundations that conform with our recommendations.
- Laboratory corrosion testing indicates that the near-surface site soils are considered corrosive. A corrosion engineer should be consulted to provide specific guidance on protective measures to mitigate corrosion.

8 RECOMMENDATIONS

The following sections present our geotechnical recommendations for the design and construction of the proposed improvements. The project improvements should be designed and constructed in accordance with these recommendations, applicable codes, and appropriate construction practices.

8.1 Seismic Design Criteria

Table 3 presents the Risk-Targeted, Maximum Considered Earthquake (MCE_R) spectral response accelerations consistent with the 2022 California Building Code (CBC) and corresponding site-adjusted and design level spectral response accelerations based on the USGS seismic design maps (SEAOC/OSHPD, 2023). Seismic Site Class D was selected based on the results of the ReMi Survey (Appendix E) for structures with a fundamental period of ½ second or less such that the exception to Site Class F in Section 20.3.1-1 of ASCE Standard 7-16 is applicable.

Table 3 – California Building Code Seismic Design Criteria

Seismic Design Parameter	Value
Site Classification	D
Site Coefficient, F_a	1
Site Coefficient, F_v	1.7
Mapped Spectral Response Acceleration at 0.2-second Period, S_s	1.639g
Mapped Spectral Response Acceleration at 1.0-second Period, S_1	0.619g
Spectral Response Acceleration at 0.2-second Period Adjusted for Site Class, S_{MS}	1.639g
Spectral Response Acceleration at 1.0-second Period Adjusted for Site Class, S_{M1}	1.052g
Design Spectral Response Acceleration at 0.2-second Period, S_{DS}	1.092g
Design Spectral Response Acceleration at 1.0-second Period, S_{D1}	0.702
Seismic Design Category for Risk Category I, II, or III	II

8.2 Foundations

Foundations should be designed in accordance with structural considerations and our geotechnical recommendations. In addition, requirements of the governing jurisdictions and applicable building codes should be considered in the design of the structures. The foundation design parameters provided in the following sections are not intended to preclude differential movement of foundations.

8.2.1 Drilled Piers

The columns for the play structures may be supported on drilled pier foundations. Drilled piers for the play structures should have embedment depths of 5 feet or more and a minimum diameter of 18-inches.

8.2.1.1 Axial Load Resistance

Drilled piers in sandy soils have relatively low friction capacity at shallow depths. Drilled piers may be designed for an allowable side friction of 18 pounds per square foot (psf) per foot of depth (up to a maximum of 360 psf) to evaluate resistance to

downward axial loads and 9 psf/foot plus the weight of the pile for upward axial loads. The allowable skin friction includes a factor of safety of 2 for downward loading and 3 for upward loading. The allowable side friction may be increased by one-third when considering loads of short duration such as wind or seismic loads. The side friction should be neglected to a depth of 12 inches where the ground adjacent to the foundation is not covered by a slab or pavement. The spacing between adjacent piers should be equivalent to three pier diameters, or more to mitigate reduction due to group effects. Minor structures supported on shallow pier foundations should be designed for a total and differential settlement due to sustained loads of approximately ¾ inch and ½ inch over a horizontal distance of 30 feet.

8.2.1.2 Lateral Load Resistance

A lateral bearing pressure of 300 pounds per square foot (psf) per foot depth up to 3,000 psf may be used to evaluate resistance to lateral loads and overturning moments. The lateral bearing pressure may be increased by a factor of 2 for structures that can accommodate ½ inch of lateral deflection and by a factor of 1⅓ for wind or seismic loading conditions. The lateral bearing pressures do not include a factor of safety. Drilled piers in a row perpendicular to the direction of lateral loading do not need to be reduced for group effects where the center-to-center pier spacing is equivalent to 3 or more pier diameters. Drilled piers in a row parallel to the direction of lateral loading do not need to be reduced for group effects where the center-to-center pier spacing is equivalent to 8 or more pier diameters.

8.2.1.3 Construction Considerations

Drilled pier excavations should be cleaned of loose material prior to pouring concrete. Drilled pier excavations that encounter groundwater may be unstable and may need to be stabilized by temporary casing or use of drilling mud. Standing water should be removed from the pier excavation or the concrete should be delivered to the bottom of the excavation, below the water surface, by tremie pipe. Casing should be removed from the excavation as the concrete is placed. Concrete should be placed in the piers in a manner that reduces the potential for segregation of the components.

8.2.2 Spread Footings

The play structures may also be supported on shallow spread footings bearing on compacted fill or native alluvium prepared in accordance with the earthwork recommendations of this report. Footings should extend 18 inches or more below the lowest adjacent finished grade.

Footings should have a width of 18 inches or more. Spread footings should be reinforced with a minimum of two No. 4 steel reinforcing bars, one placed near the top and one placed near the bottom of the footings, and further detailed in accordance with the recommendations of the structural engineer.

Footings, as described above and bearing on compacted subgrade soils, may be designed using a net allowable bearing capacity (dead plus live load at FS of 3) of 1,500 psf. The allowable bearing capacity may be increased by one-third when considering loads of short duration such as wind or seismic forces.

Total and differential settlements for footings designed and constructed in accordance with the above recommendations are estimated to be less than approximately 1 inch and ½ inch, respectively.

Footings bearing on compacted fill or native alluvium may be designed using a coefficient of friction of 0.35, where the total frictional resistance equals the coefficient of friction times the dead load. Footings may be designed using a passive resistance of 300 psf per foot of depth for level ground condition up to a value of 3,000 psf. The upper 1 foot of soil should be neglected when adjacent surfaces are not covered by pavement. The allowable lateral resistance can be taken as the sum of the frictional resistance and passive resistance provided the passive resistance does not exceed one-half of the total allowable resistance. In the event that the passive resistance is greater than one-half of the total allowable resistance, the passive resistance should be reduced to be the same value as the frictional resistance. The passive resistance may be increased by one-third when considering loads of short duration such as wind or seismic forces.

8.3 Earthwork Recommendations

The site of the proposed improvements should be prepared by clearing and grubbing to remove debris, rubble, and vegetation, from excavation and fill areas. The debris generated from clearing and grubbing operations should be hauled off site to a legal dump site. Excavations created by the clearing and grubbing operations should be backfilled with compacted fill in accordance with the recommendations in this report.

8.3.1 Subgrade Preparation

Subgrade that will be covered by fill, except for utility trench subgrade, should be scarified and moisture conditioned, as-needed, to achieve a moisture content near and above the optimum, before compaction, by mechanical means, to 95 percent of the reference density

as evaluated by ASTM D1557. Utility trench subgrade that is loose or soft should be removed or compacted to achieve a firm condition.

8.3.2 Fill Materials, Placement, and Compaction

In general, fill should not consist of pea gravel and should be free of rocks or lumps in excess of 3-inches in median dimension, hazardous materials, trash, debris, and vegetation or other deleterious material. In addition, import fill should be close graded with 35 percent or more by dry weight passing the No. 4 sieve and either: an expansion index of 50 or less, a plasticity index of 12 or less, or less than 10 percent by dry weight passing the No. 200 sieve.

Prior to placement of fill, the geotechnical engineer should check the exposed subgrade for unsuitable materials including organic matter, deleterious fill, or dry, loose, soft, wet, or expansive soil. The unsuitable materials should be removed and replaced with compacted fill or otherwise mitigated in accordance with the field recommendations of the geotechnical engineer. The on-site soil is generally suitable for reuse as general fill and subgrade provided that it is processed, as-needed, to remove rocks or lumps in excess of 3-inches in median dimension, hazardous materials, trash, debris, and vegetation or other deleterious material.

Fill and backfill should be compacted in horizontal lifts in conformance with the recommendations presented in Table 4. The allowable uncompacted thickness of each lift of fill depends on the type of compaction equipment utilized, but generally should not exceed 8 inches in loose thickness.

Table 4 – Fill Placement and Compaction Recommendations

Fill Type	Location	Compacted Density[1]	Moisture Content[2]
Subgrade	In locations not already specified	95 percent	Near Optimum
Bedding and Pipe Zone Fill	Material below invert to 12 inches above pipe or conduit	90 percent	Near Optimum
Trench Backfill	In locations not already specified	90 percent	Near Optimum
General Fill	In locations not already specified	90 percent	Near Optimum

Notes:
1 Expressed as percent relative compaction or ratio of field density to reference density (typically on a dry density basis for soil and aggregate). The reference density of soil and aggregate should be evaluated by ASTM D 1557.
2 Target moisture content at compaction relative to the optimum as evaluated by ASTM D 1557.

8.3.3 Temporary Excavations and Shoring

We don't anticipate that the proposed project will include excavations requiring shoring. However, the recommendations provided in this section apply if excavations are needed.

Trench excavations shall be stabilized in accordance with the Excavation Rules and Regulations (29 Code of Federal Regulations [CFR], Part 1926) stipulated by the Occupational Safety and Health Administration (OSHA). Stabilization shall consist of shoring sidewalls or laying slopes back.

Dewatering pits or sumps should be used to depress the groundwater level (if encountered) below the bottom of the excavation. Table 5 lists the OSHA material type classifications and corresponding allowable temporary slope layback inclinations for soil deposits that may be encountered on site. Alternatively, an internally-braced shoring system or trench shield conforming to the OSHA Excavation Rules and Regulations (29 CFR, Part 1926) may be used to stabilize excavation sidewalls during construction. The lateral earth pressures listed in Table 5 may be used to design or select the internally-braced shoring system or trench shield. The recommendations listed in this table are based upon the limited subsurface data provided by our subsurface exploration and reflect the influence of the environmental conditions that existed at the time of our exploration. Excavation stability, material classifications, allowable slopes, and shoring pressures should be re-evaluated and revised, as-needed, during construction. Excavations, shoring systems and the surrounding areas should be evaluated daily by a competent person for indications of possible instability or collapse.

Table 5 – OSHA Material Classifications and Allowable Slopes

Formation	OSHA Classification	Allowable Temporary Slope[1,2,3]	Lateral Earth Pressure on Shoring[4] (psf)
Alluvium (above groundwater)	Type C	1½ h:1v (34°)	80×D + 72

Notes:
1 Allowable slope for excavations less than 20 feet deep. Excavation sidewalls in cohesive soil may be benched to meet the allowable slope criteria (measured from the bottom edge of the excavation). The allowable bench height is 4 feet. The bench at the bottom of the excavation may protrude above the allowable slope criteria.
2 In layered soil, layers shall not be sloped steeper than the layer below.
3 Temporary excavations less than 5 feet deep may be made with vertical side slopes and remain unshored if judged to be stable by a competent person (29 CFR, Part 1926.650).
4 'D' is depth of excavation for excavations up to 20 feet deep. Includes a surface surcharge equivalent to two feet of soil.

The shoring system should be designed or selected by a suitably qualified individual or specialty subcontractor. The shoring parameters presented in this report are preliminary design criteria, and the designer should evaluate the adequacy of these parameters and make appropriate modifications for their design. We recommend that the contractor take appropriate measures to protect workers. OSHA requirements pertaining to worker safety should be observed.

Excavations made in close proximity to existing structures may undermine the foundation of those structures and/or cause soil movement related distress to the existing structures. Stabilization techniques for excavations in close proximity to existing structures will need to account for the additional loads imposed on the shoring system and appropriate setback distances for temporary slopes. The geotechnical engineer should be consulted for additional recommendations if the proposed excavations cross below a plane extending down and away from the foundation bearing surfaces of the adjacent structure at an angle of 2:1 (horizontal to vertical).

The excavation bottoms may encounter wet, loose material which may be subject to pumping under heavy equipment loads. The contractor should be prepared to stabilize the bottom of the excavations. In general, unstable bottom conditions may be mitigated by using a stabilizing geogrid, overexcavating the excavation bottom to suitable depths and replacing with compacted fill, or other suitable methods. Additionally, aeration of wet soils should be anticipated.

8.3.4 Construction Dewatering

During peak rainstorm season, groundwater was encountered at 6 feet below ground surface during our subsurface exploration, which is higher than typical levels. Variations in groundwater levels across the site and over time should be anticipated. Water intrusion into the excavations may occur as a result of groundwater intrusion or surface runoff. The contractor should be prepared to take appropriate dewatering measures in the event that water intrudes into the excavations. Sump pits, trenches, or similar measures should be used to depress the water level below the bottom of the excavation. Considerations for construction dewatering should include anticipated drawdown, volume of pumping, potential for settlement, and groundwater discharge. Disposal of groundwater should be performed in accordance with the guidelines of the Regional Water Quality Control Board.

8.4 Concrete Placement

Concrete in contact with soil or water that contains high concentrations of soluble sulfates can be subject to chemical and/or physical deterioration. Due to the potential variability in soil conditions across the site, we recommend that Type V cement with a water/cement ratio of 0.45 or less be considered for the project.

8.5 Construction Observation and Testing

The recommendations provided in this report are based on subsurface conditions encountered in discrete exploratory borings and soundings. During construction, the geotechnical engineer or his representative in the field should be allowed to check the exposed subsurface conditions. During construction, the geotechnical engineer or his representative should be allowed to:

- Check for unsuitable materials and observe foundation excavations.
- Observe preparation and compaction of subgrade.
- Check and test imported materials prior to use as fill.
- Observe placement and compaction of fill.
- Perform field density tests to evaluate fill and subgrade compaction.
- Observe placement of reinforcing steel in foundations.

The recommendations provided in this report assume that Ninyo & Moore will be retained as the geotechnical consultant during the construction phase of the project. If another geotechnical consultant is selected, we request that the selected consultant provide a letter to the architect and the owner (with a copy to Ninyo & Moore) indicating that they fully understand Ninyo & Moore's recommendations, and that they are in full agreement with the recommendations contained in this report.

9 LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced

through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended for design purposes only. It does not provide sufficient data to prepare an accurate bid by contractors. It is suggested that the bidders and their geotechnical consultant perform an independent evaluation of the subsurface conditions in the project areas. The independent evaluations may include, but not be limited to, review of other geotechnical reports prepared for the adjacent areas, site reconnaissance, and additional exploration and laboratory testing.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

10 REFERENCES

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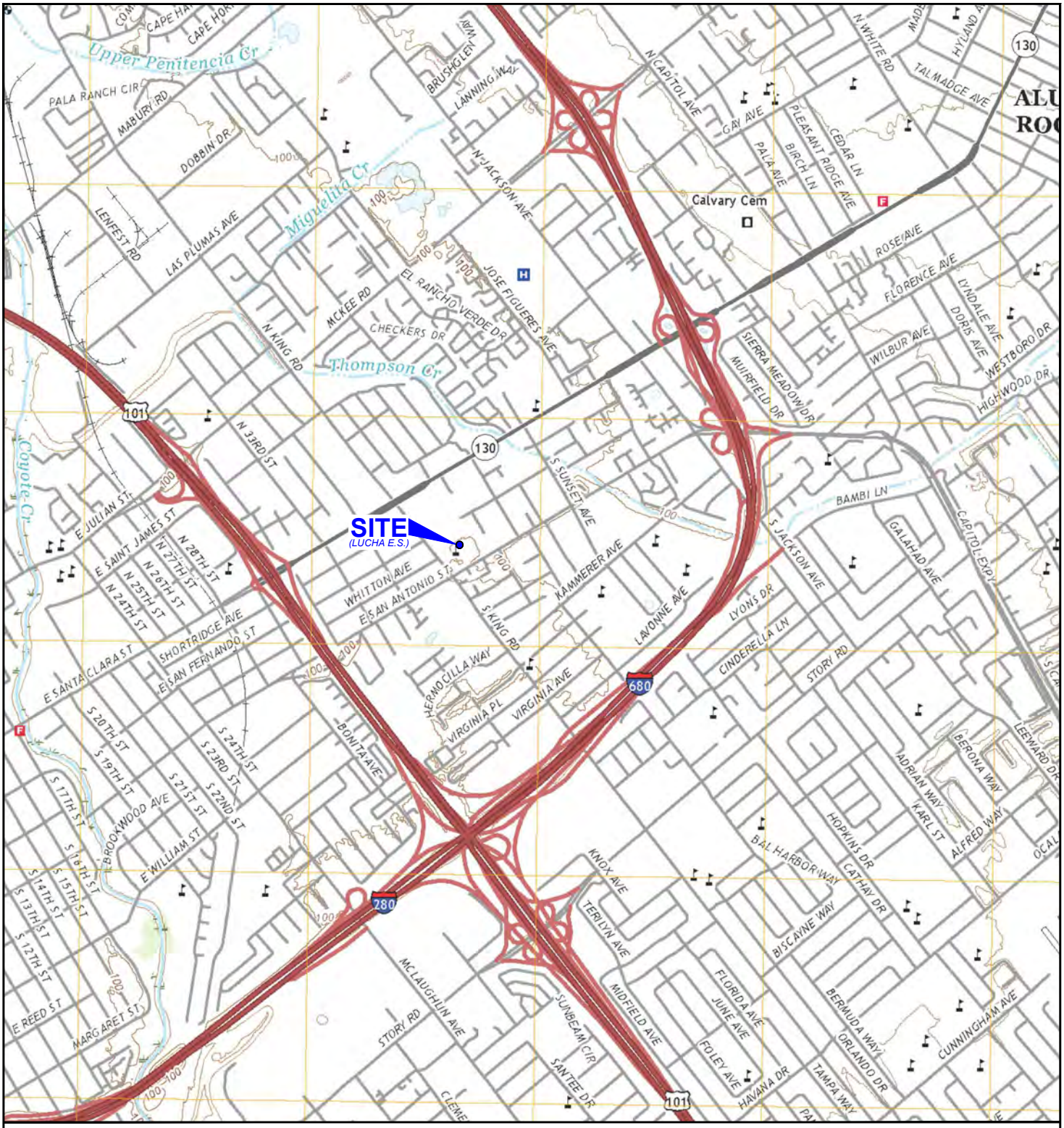
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FIGURES



404695001.dwg 12/08/2023 AEK

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: USGS, 2018

N

SCALE (FEET)
0 2,000 4,000

FIGURE 1

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

SITE LOCATION

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET
SAN JOSE, CALIFORNIA
404695001 I 05/24



NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: GOOGLE EARTH, 2024

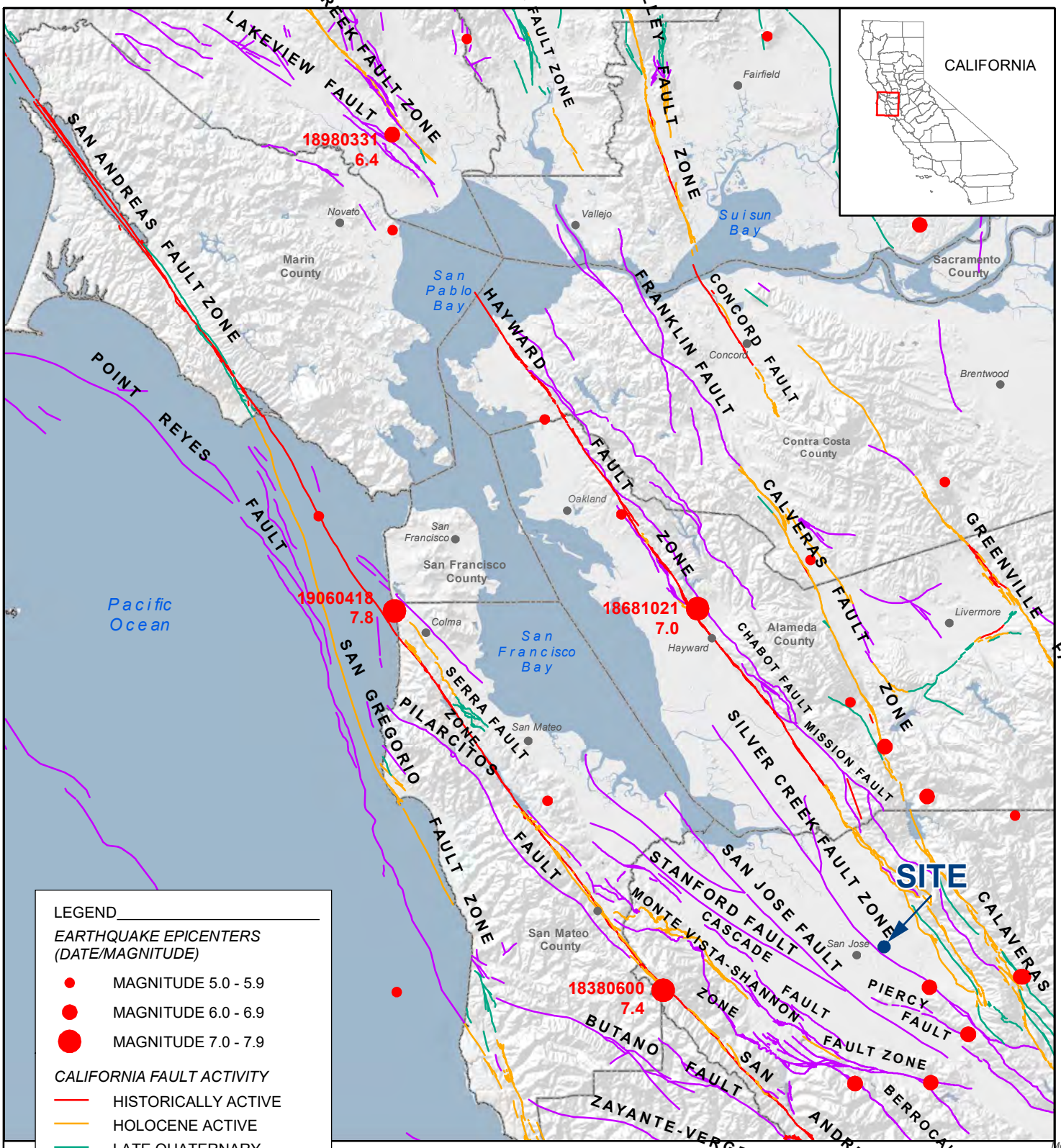
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FIGURE 2

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EXPLORATION LOCATIONS

LUCHA ELEMENTARY SCHOOL
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404695001 I 05/24



404695001-FL.pdf 12/10/2023 AEK

NOTE: DIRECTIONS, DIMENSIONS, AND LOCATIONS ARE APPROXIMATE

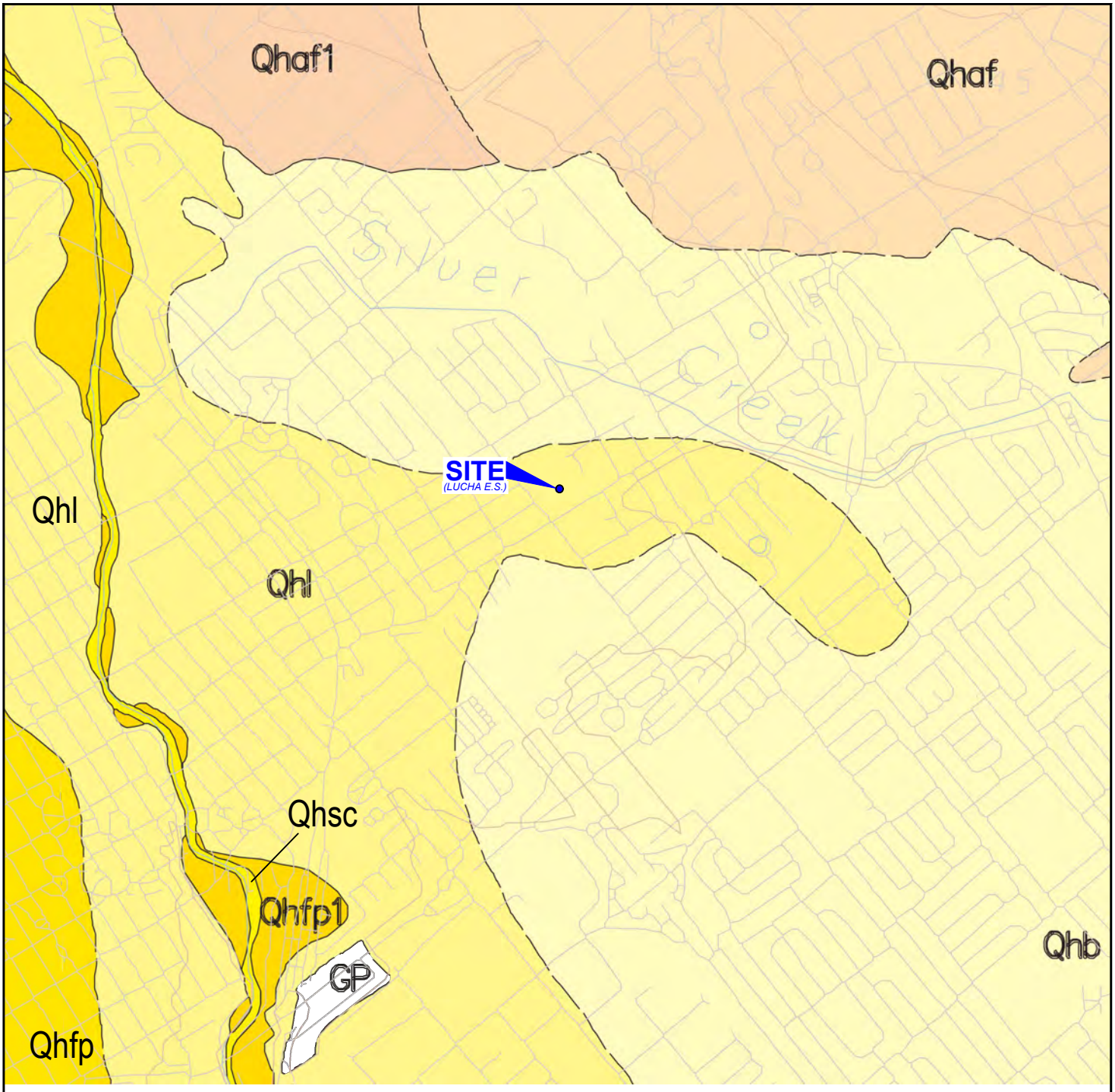
SOURCES: CALIFORNIA GEOLOGICAL SURVEY, 2010, FAULT ACTIVITY MAP OF CALIFORNIA; CALIFORNIA GEOLOGICAL SURVEY, 2000, MAP SHEET 49

FIGURE 3

FAULT LOCATIONS AND EARTHQUAKE EPICENTERS

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET
SAN JOSE, CALIFORNIA
404695001 | 05/24

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LEGEND

GP	GRAVEL PITS (HISTORIC)	Qhfp1	FIRST ALLUVIAL TERRACE DEPOSITS (HOLOCENE)	Qhaf1	YOUNGER ALLUVIAL FAN DEPOSITS (HOLOCENE)
Qhsc	STREAM CHANNEL DEPOSITS (HOLOCENE)	Qhfp	FLOODPLAIN DEPOSITS (HOLOCENE)	Qhaf	ALLUVIAL FAN DEPOSITS (HOLOCENE)
Qhl	NATURAL LEVEE DEPOSITS (HOLOCENE)	Qhb	FLOODBASIN DEPOSITS (HOLOCENE)		

FAULT

GEOLOGIC CONTACT

N

SCALE (FEET)

0 2,000 4,000

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE I REFERENCE: USGS, OFR 94-231,1994

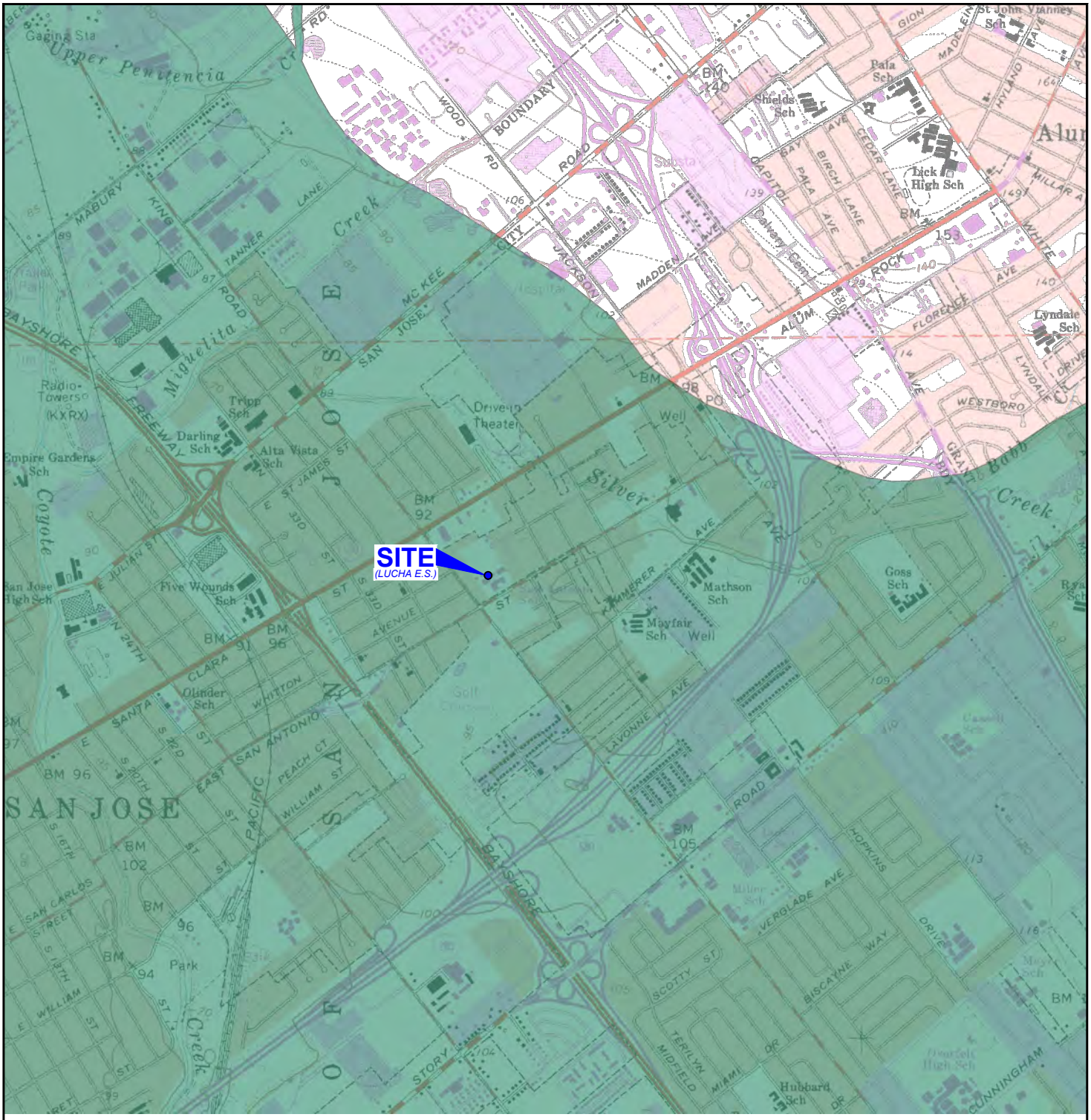
404695001.dwg 12/10/2023 AEK

FIGURE 4

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REGIONAL GEOLOGY

LUCHA ELEMENTARY SCHOOL
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LEGEND

LIQUEFACTION ZONES:
Areas where historic occurrence of liquefaction, or local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE
REFERENCE: CGS, 1982, 2001

N

SCALE (FEET)
0 2,000 4,000

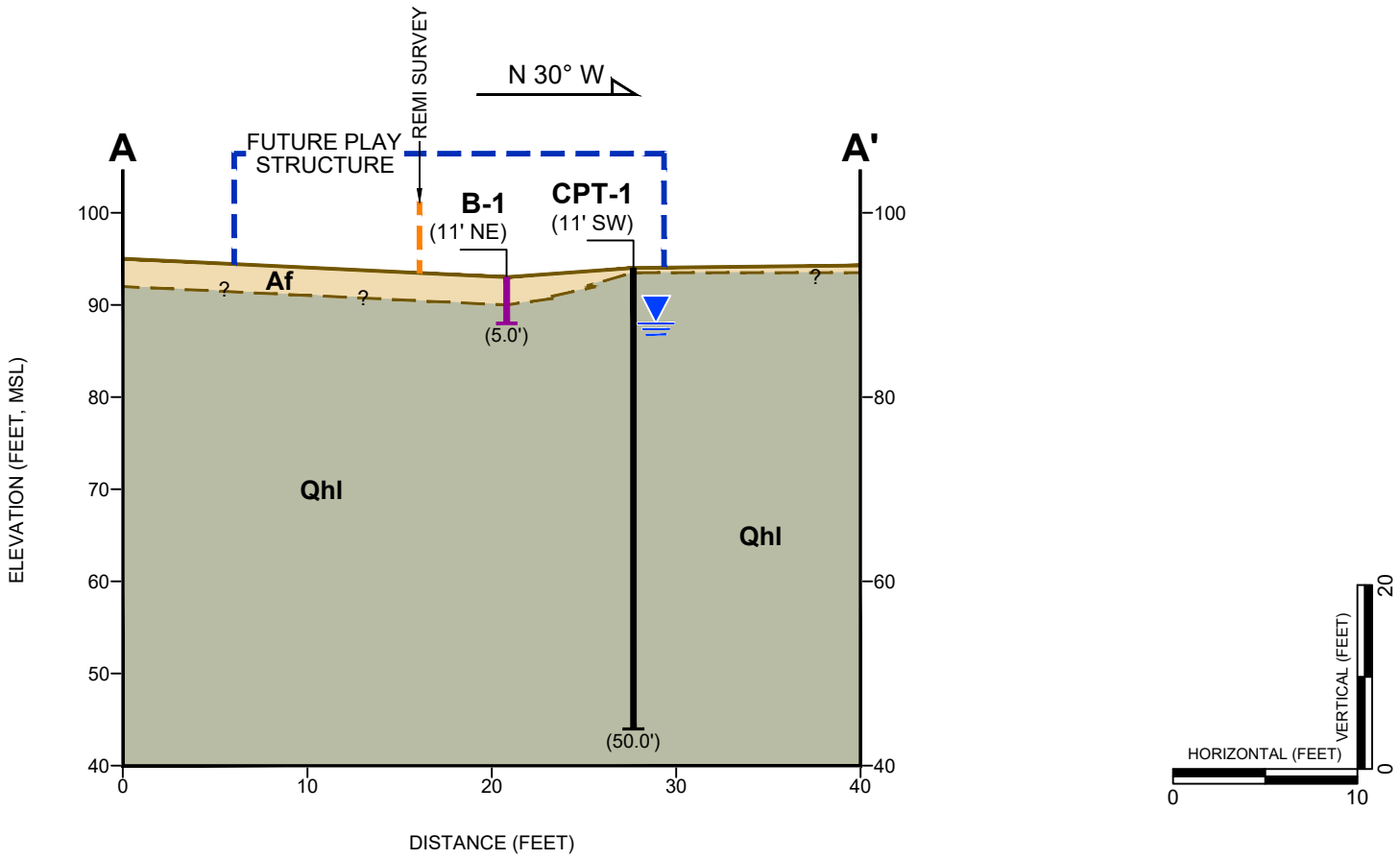
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FIGURE 5

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SEISMIC HAZARD ZONES

LUCHA ELEMENTARY SCHOOL
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SAN JOSE, CALIFORNIA
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LEGEND

Af	ARTIFICIAL FILL	??	GEOLOGIC CONTACT: APPROXIMATE, QUERIED WHERE UNCERTAIN		GROUNDWATER DEPTH (MEASURED AT TIME OF EXPLORATION)	B-1	BORING
Qhl	NATURAL LEVEE DEPOSITS (HOLOCENE)	MSL	MEAN SEA LEVEL			(5.0')	TOTAL DEPTH (FEET)
						CPT-1	CPT
						(50.0')	TOTAL DEPTH (FEET)

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE

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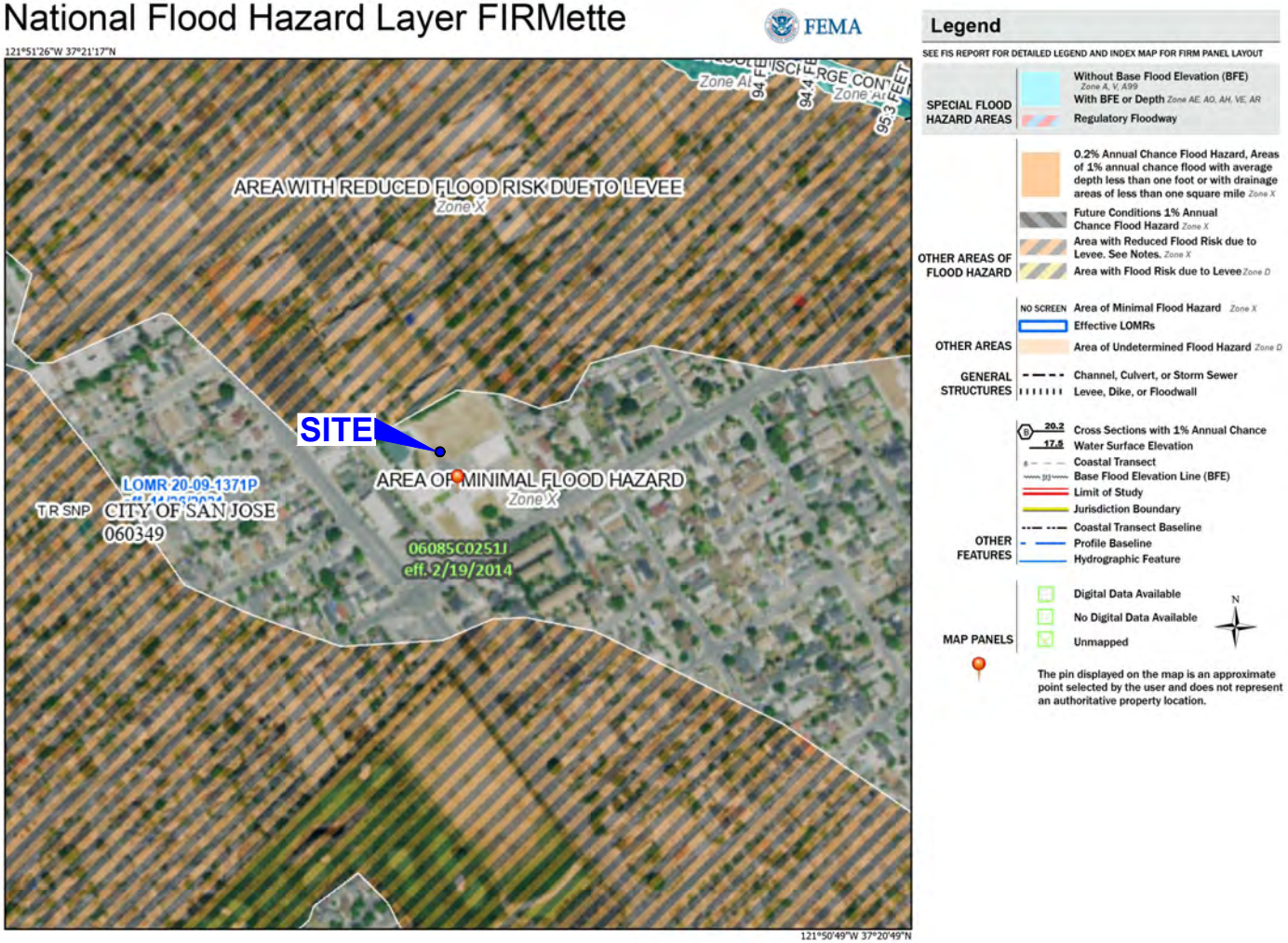
FIGURE 6

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GEOLOGIC CROSS SECTION A-A'

LUCHA ELEMENTARY SCHOOL
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SAN JOSE, CALIFORNIA
404695001 I 05/24

National Flood Hazard Layer FIRMette



Basemap Imagery Source: USGS National Map 2023

NOTE: DIMENSIONS, DIRECTIONS, AND LOCATIONS ARE APPROXIMATE | REFERENCE: FEMA, 2023

N

SCALE (FEET)

0 600 1,200

404695001.dwg 12/09/2023 AEK

FIGURE 7

Ninyo & Moore
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FEMA FLOOD MAP

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET
SAN JOSE, CALIFORNIA
404695001 I 05/24

APPENDIX A

Cone Penetration Testing

APPENDIX A

CONE PENETRATION TESTING

Field Procedure for Cone Penetration Testing

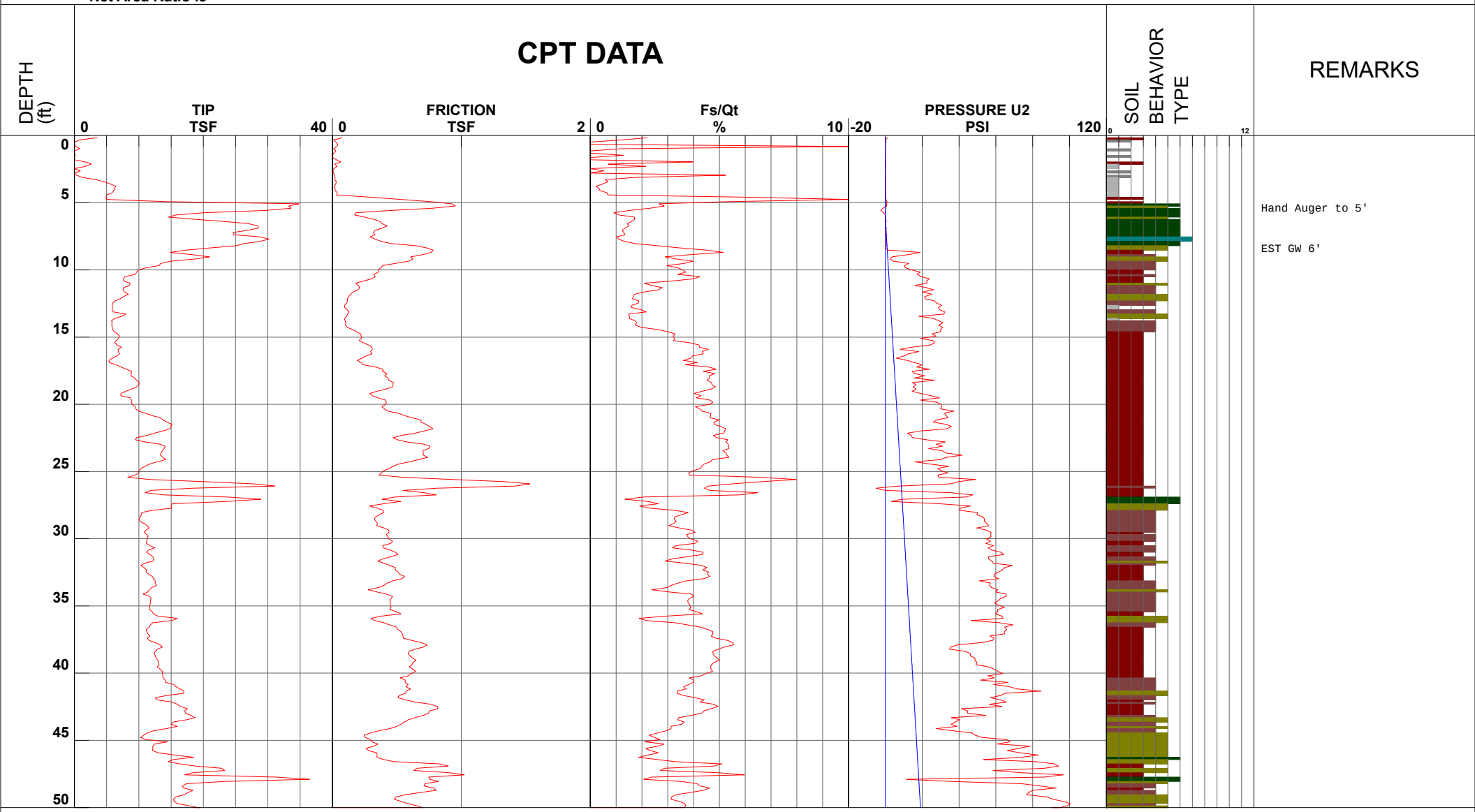
A penetrometer with a conical tip having an apex angle of 60 degrees and a cone base area of 15 square centimeters was hydraulically pushed through the soil using the reaction mass of a 20-ton rig at a constant rate of about 20 millimeters per second in accordance with ASTM D 5778. The penetrometer was instrumented to measure, by electronic methods, the water pressure acting on a transducer near the cone tip, the force on the conical point required to penetrate the soil, and the force on a friction sleeve behind the cone tip as the penetrometer was advanced. Tip resistance, sleeve friction, and pore water pressure data were collected and recorded electronically at intervals of approximately 2 inches while the cone was advanced. Cone tip resistance corrected for pore pressure (Qt) was calculated by dividing the measured force of penetration by the cone base area and adding a fraction of the recorded pore pressure (U2). Friction sleeve resistance (Fs) was calculated by dividing the measured force on the friction sleeve by the surface area of the sleeve. The friction ratio was calculated as the ratio of the tip resistance to the sleeve friction (Fs/Qt). The tip resistance and friction ratio were used to evaluate the soil behavior type (Robertson, 1986). Graphs of tip resistance, sleeve friction, friction ratio, pore pressure, and interpreted soil behavior type are presented on the logs of the CPT Soundings.

Ninyo & Moore

Project	Lucha ES	Operator	JM-FA	Filename	SDF(444).cpt
Job Number	404695001	Cone Number	DDG1627	GPS	
Hole Number	CPT-01	Date and Time	11/2/2023 4:40:42 PM	Maximum Depth	50.52 ft
EST GW Depth During Test		6.00 ft			

Net Area Ratio .8

CPT DATA



REMARKS

Hand Auger to 5'

EST GW 6'

1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 15cm²

S*Soil behavior type and SPT based on data from UBC-1983

APPENDIX B

Boring Logs

APPENDIX B

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

A disturbed soil sample was obtained in the field using the following method.

Bulk Sample

Bulk samples of representative earth materials were obtained from the hand auger borings. The sample was bagged and transported to the laboratory for testing.

The Standard Penetration Test (SPT) Sampler

Disturbed drive samples of earth materials were obtained by means of a Standard Penetration Test sampler. The sampler is composed of a split barrel with an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The sampler was driven into the ground 18 inches with a 140-pound hammer free-falling from a height of 30 inches in accordance with ASTM D 1586. An automatic trip hammer was used to drive the sampler. The blow counts were recorded for every 6 inches of penetration; the blow counts reported on the logs are those for the last 12 inches of penetration. The blows count values on the boring logs have not been corrected for the effects of overburden pressure, sampler size or hammer efficiency. Soil samples were observed and removed from the sampler, bagged, sealed and transported to the laboratory for testing.

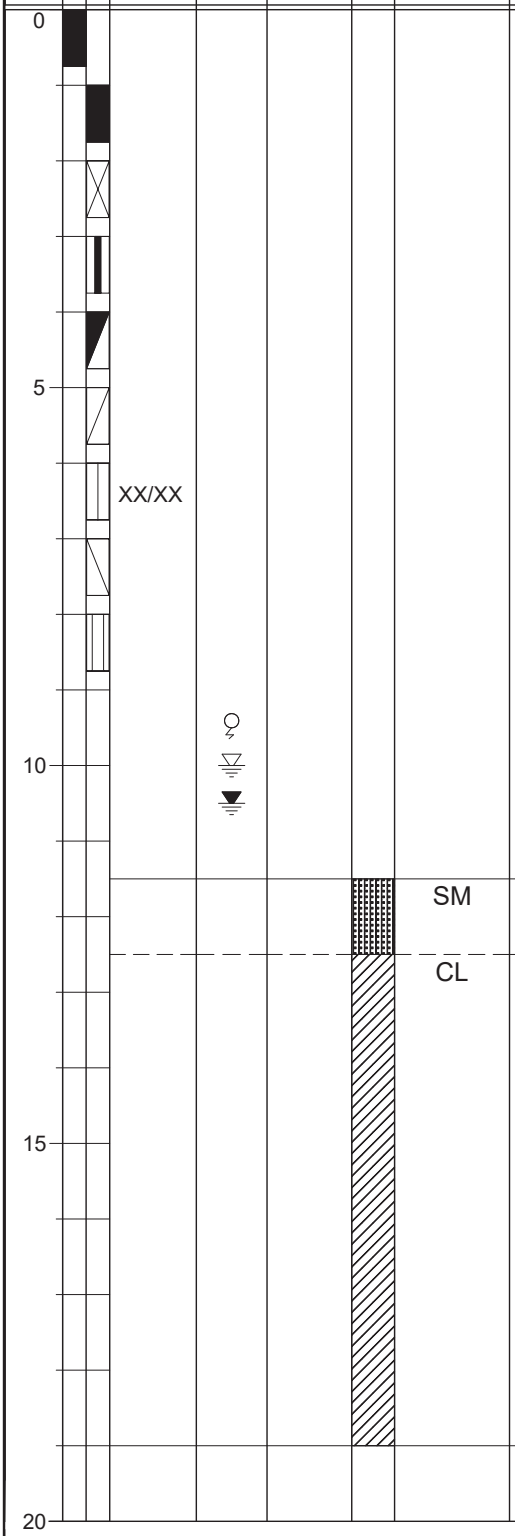
Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following method.

Modified Split-Barrel Drive Sampler

Relatively undisturbed soil samples were obtained in the field using a modified split-barrel drive sampler. The sampler, with an external diameter of 3.0 inches, was lined with 6-inch long, thin stainless steel liners with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer in accordance with ASTM D 3550. An automatic trip hammer was used to drive the sampler. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The blows count values on the boring logs have not been corrected for the effects of overburden pressure, sampler size or hammer efficiency. The samples were removed from the sample barrel in the liners, sealed, and transported to the laboratory for testing.

BORING LOG EXPLANATION SHEET



Bulk sample.

Modified split-barrel drive sampler.

No recovery with modified split-barrel drive sampler.

Sample retained by others.

Standard Penetration Test (SPT).

No recovery with a SPT.

Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.

No recovery with Shelby tube sampler.

Continuous Push Sample.

Seepage.

Groundwater encountered during drilling.

Groundwater measured after drilling.

SM

MAJOR MATERIAL TYPE (SOIL):

Solid line denotes unit change.

CL

Dashed line denotes material change.

Attitudes: Strike/Dip
b: Bedding
c: Contact
j: Joint
f: Fracture
F: Fault
cs: Clay Seam
s: Shear
bss: Basal Slide Surface
sf: Shear Fracture
sz: Shear Zone
sbs: Shear Bedding Surface

The total depth line is a solid line that is drawn at the bottom of the boring.

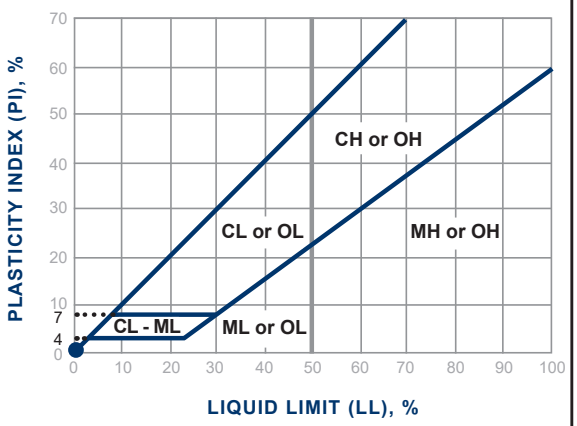
Soil Classification Chart Per ASTM D 2488

Primary Divisions			Secondary Divisions	
			Group Symbol	Group Name
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	**GRAVEL** more than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVEL less than 5% fines	GW	well-graded GRAVEL
			GP	poorly graded GRAVEL
		GRAVEL with DUAL CLASSIFICATIONS 5% to 12% fines	GW-GM	well-graded GRAVEL with silt
			GP-GM	poorly graded GRAVEL with silt
			GW-GC	well-graded GRAVEL with clay
			GP-GC	poorly graded GRAVEL with
		GRAVEL with FINES more than 12% fines	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND 50% or more of coarse fraction passes No. 4 sieve	CLEAN SAND less than 5% fines	SW	well-graded SAND
			SP	poorly graded SAND
		SAND with DUAL CLASSIFICATIONS 5% to 12% fines	SW-SM	well-graded SAND with silt
			SP-SM	poorly graded SAND with silt
			SW-SC	well-graded SAND with clay
			SP-SC	poorly graded SAND with clay
		SAND with FINES more than 12% fines	SM	silty SAND
			SC	clayey SAND
			SC-SM	silty, clayey SAND
FINE-GRAINED SOILS 50% or more passes No. 200 sieve	**SILT and CLAY** liquid limit less than 50%	INORGANIC	CL	lean CLAY
			ML	SILT
			CL-ML	silty CLAY
		ORGANIC	OL (PI > 4)	organic CLAY
			OL (PI < 4)	organic SILT
	SILT and CLAY liquid limit 50% or more	INORGANIC	CH	fat CLAY
			MH	elastic SILT
		ORGANIC	OH (plots on or above "A"-line)	organic CLAY
			OH (plots below "A"-line)	organic SILT
	Highly Organic Soils		PT	Peat

Grain Size

Description		Sieve Size	Grain Size	Approximate Size
Boulders		> 12"	> 12"	Larger than basketball-sized
Cobbles		3 - 12"	3 - 12"	Fist-sized to basketball-sized
Gravel	Coarse	3/4 - 3"	3/4 - 3"	Thumb-sized to fist-sized
	Fine	#4 - 3/4"	0.19 - 0.75"	Pea-sized to thumb-sized
Sand	Coarse	#10 - #4	0.079 - 0.19"	Rock-salt-sized to pea-sized
	Medium	#40 - #10	0.017 - 0.079"	Sugar-sized to rock-salt-sized
	Fine	#200 - #40	0.0029 - 0.017"	Flour-sized to sugar-sized
Fines		Passing #200	< 0.0029"	Flour-sized and smaller

Plasticity Chart



Apparent Density - Coarse-Grained Soil

Apparent Density	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Loose	≤ 4	≤ 8	≤ 3	≤ 5
Loose	5 - 10	9 - 21	4 - 7	6 - 14
Medium Dense	11 - 30	22 - 63	8 - 20	15 - 42
Dense	31 - 50	64 - 105	21 - 33	43 - 70
Very Dense	> 50	> 105	> 33	> 70

Consistency - Fine-Grained Soil

Consis-tency	Spooling Cable or Cathead		Automatic Trip Hammer	
	SPT (blows/foot)	Modified Split Barrel (blows/foot)	SPT (blows/foot)	Modified Split Barrel (blows/foot)
Very Soft	< 2	< 3	< 1	< 2
Soft	2 - 4	3 - 5	1 - 3	2 - 3
Firm	5 - 8	6 - 10	4 - 5	4 - 6
Stiff	9 - 15	11 - 20	6 - 10	7 - 13
Very Stiff	16 - 30	21 - 39	11 - 20	14 - 26
Hard	> 30	> 39	> 20	> 26

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USCS METHOD OF SOIL CLASSIFICATION

DATE DRILLED 11/2/2023 BORING NO. B-1

GROUND ELEVATION 94' ± MSL SHEET 1 OF 1

METHOD OF DRILLING 3-inch diameter Hand Auger

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DHL LOGGED BY SSA REVIEWED BY RH

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			Qs = 35	8.4			GW	FILL:
			Qs = 42				SC	Light gray, dry, medium dense, well-graded GRAVEL.
			Qs = 44					Light brown, moist, loose, clayey SAND; few silt; few gravel.
			Qs = 57					Brown; medium dense.
			Qs = 61					
10								Total depth = 5.0 feet.
								Units for Static Cone Penetration Test (Qs) readings are in kg/cm2.
								Backfilled with neat cement shortly after drilling.
								Notes:
								Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
								The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents (Google, 2023).
20								
30								
40								

DATE DRILLED 4/10/2024 BORING NO. B-2

GROUND ELEVATION 95' ± MSL SHEET 1 OF 1

METHOD OF DRILLING 4" SSA, B-24 Truck Mounted Rig (California Geotech)

DRIVE WEIGHT 140 lbs (wireline) DROP 30 inches

SAMPLED BY SSA LOGGED BY SSA REVIEWED BY RH

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						GW / SC	FILL: Light gray, dry, medium dense, well-graded GRAVEL. Light brown, moist, loose, clayey SAND; few silt; few gravel.
		13				CL	ALLUVIUM: Dark brown, moist, stiff (PP = 2.5-3.0), sandy CLAY and SILT.
		14					Brown.
10		9	▼				Wet; firm.
		8				SM / CL	Brown, wet, very loose, silty SAND. Brown, wet, firm, sandy lean CLAY.
		7					
		8					Soft (PP = 0.75-1.0).
20		15					Firm (PP = 1.0-1.5).
		20					
30							Total depth = 26.5 feet. Backfilled with neat cement shortly after drilling. Notes: Groundwater was measured at a depth of approximately 10 feet in the borehole shortly after completion of drilling. Groundwater may rise to a level higher than that measured in borehole due to seasonal variations in precipitation and several other factors as discussed in the report. The ground elevation shown above is an estimation only. It is based on our interpretations of published maps and other documents reviewed for the purposes of this evaluation. It is not sufficiently accurate for preparing construction bids and design documents (Google, 2024).
40							

FIGURE B- 2

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LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

DATE DRILLED 11/2/2023 BORING NO. CPT-1

GROUND ELEVATION 94' ± MSL SHEET 1 OF 1

METHOD OF DRILLING 3-inch diameter Hand Auger

DRIVE WEIGHT _____ DROP _____

SAMPLED BY DHL LOGGED BY SSA REVIEWED BY RH

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							GW	FILL: Gray, dry, dense, well-graded GRAVEL.
							CL	Brown, moist, firm, lean CLAY.
								CPT was advanced post hand augering.
10								
20								
30								
40								

FIGURE B- 3

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LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

APPENDIX C

Laboratory Testing

APPENDIX C

LABORATORY TESTING

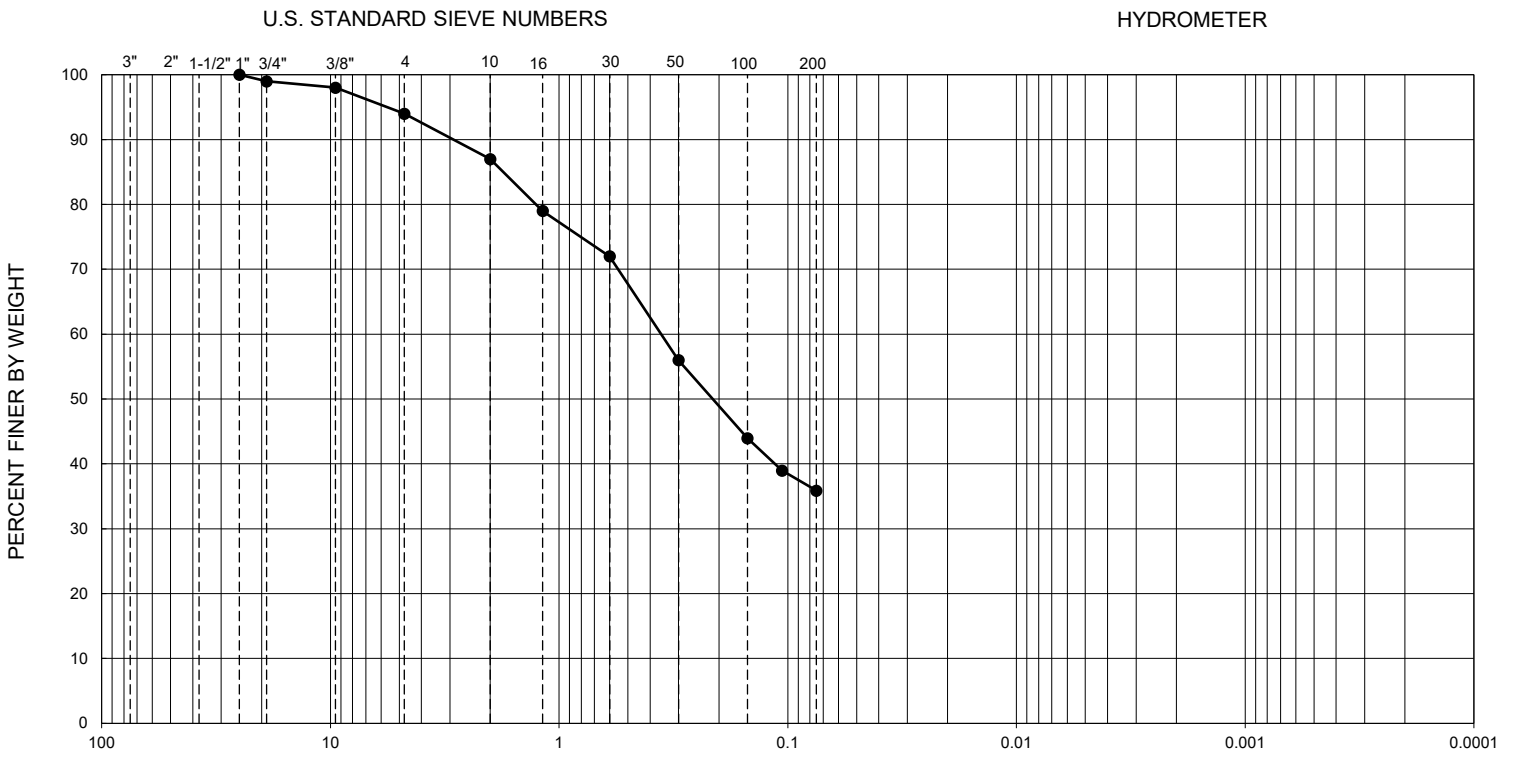
Classification
Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488-00. Soil classifications are indicated on the log of the exploratory boring in Appendix B.

Moisture Content
The moisture content of samples obtained from the exploratory borings were evaluated in accordance with ASTM D 2216. The test results are presented on the boring logs in Appendix B.

Gradation Analysis
A gradation analysis test was performed on a selected representative soil sample in accordance with ASTM D 422. The grain-size distribution curve is shown on Figures C-1 and C-2. The test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System (USCS).

Atterberg Limits
Tests were performed on selected representative fine-grained soil sample to evaluate the liquid limit, plastic limit, and plasticity index in accordance with ASTM D 4318. These test results were utilized to evaluate the soil classification in accordance with the Unified Soil Classification System (USCS). The test results and classifications are shown on Figure C-3.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (percent)	USCS
●	B-1	0.0 - 5.0	--	--	--	--	--	0.38	--	--	36	SC

PERFORMED IN ACCORDANCE WITH ASTM D 422 / D6913

Soak Time: 2.0

Group Name: clayey SAND; few gravel

% Gravel 6

% Sand 58

% Fines 36

FIGURE C-1

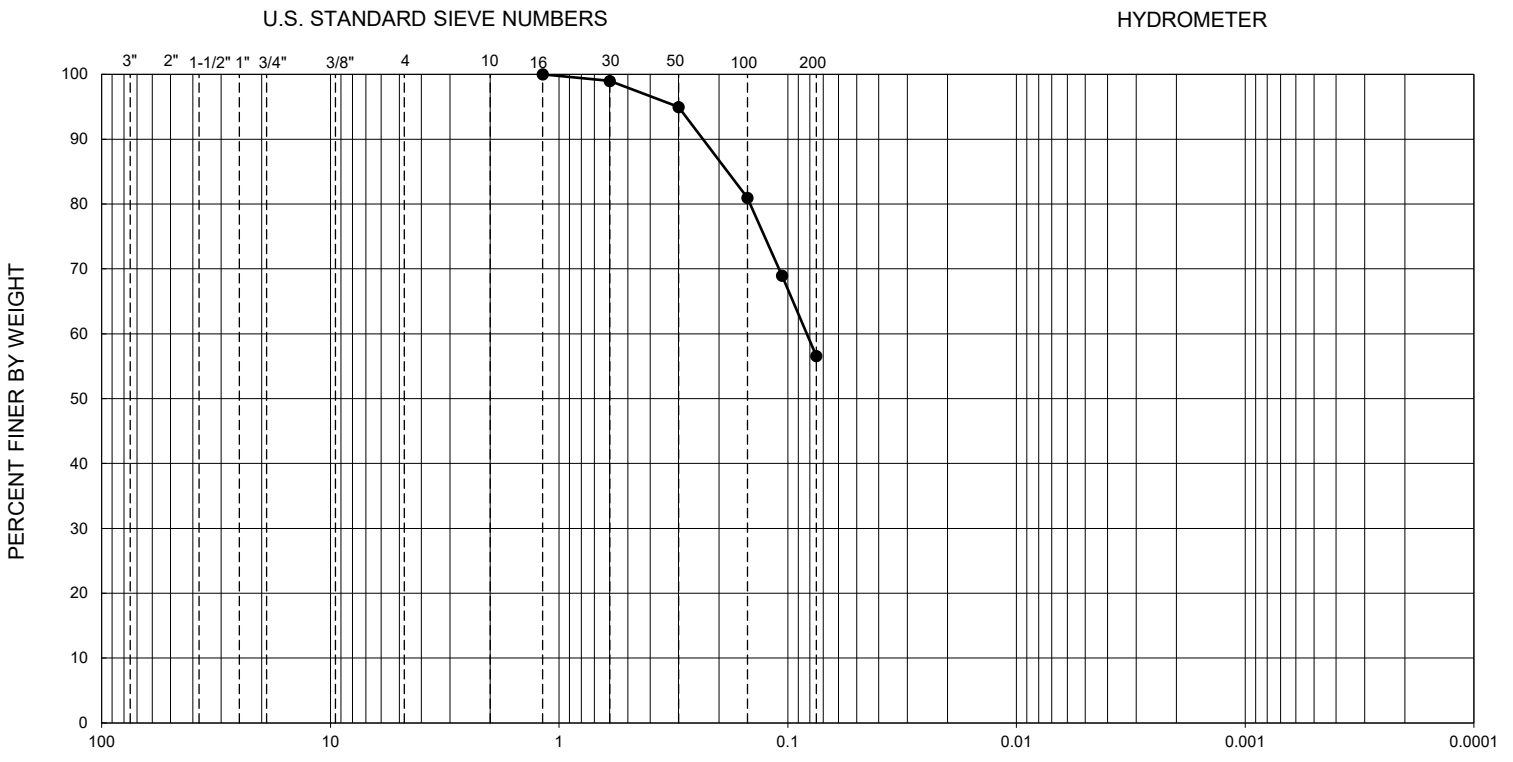
GRADATION TEST RESULTS

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

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GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	SILT	CLAY



Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (percent)	USCS
●	B-2	7.5 - 8.0	--	--	--	--	--	0.08	--	--	57	CL

PERFORMED IN ACCORDANCE WITH ASTM D 422 / D6913

Soak Time: 2.0

Group Name: sandy lean CLAY

% Gravel 0

% Sand 43

% Fines 57

FIGURE C-2

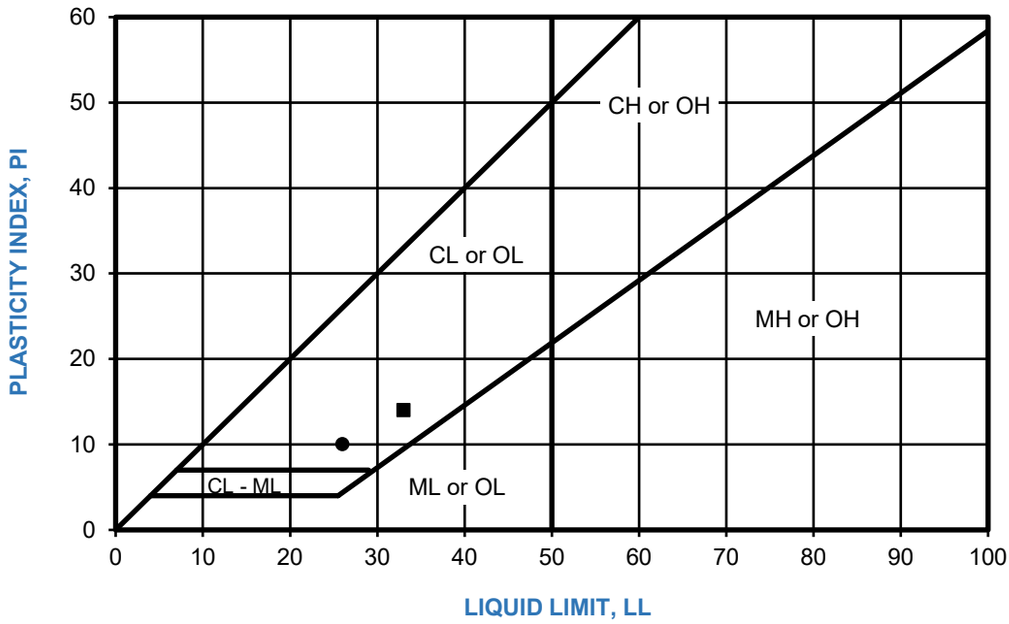
GRADATION TEST RESULTS

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

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SYMBOL	LOCATION	DEPTH (ft)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	USCS CLASSIFICATION (Fraction Finer Than No. 40 Sieve)	USCS
●	B-2	6.0 - 6.5	26	16	10	CL	CL
■	B-2	11.5 - 12.0	33	19	14	CL	CL



PERFORMED IN ACCORDANCE WITH ASTM D 4318

FIGURE C-3

ATTERBERG LIMITS TEST RESULTS

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

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APPENDIX D

Corrosivity Testing (CERCO Analytical)

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

14 November, 2023

Job No. 2311015
Cust. No.13270

Ms. Shravya Anipindi
Ninyo & Moore
2149 O'Toole Avenue, Suite 30
San Jose, CA 95131

Subject: Project No.: 404695001
Project Name: Lucha & Sylvia Cassell Elementary Schools, 1711 E. San Antonio Street, & 1300 Tallahassee Drive, San Jose, CA
Corrosivity Analysis – ASTM Test Methods

Dear Ms. Anipindi:

Pursuant to your request, CERCO Analytical has analyzed the soil samples submitted on November 09, 2023. Based on the analytical results, this brief corrosivity evaluation is enclosed for your consideration.

Based upon the resistivity measurements, Sample No.002 is classified as "corrosive" and Sample No.001 is classified as "moderately corrosive". All buried iron, steel, cast iron, ductile iron, galvanized steel and dielectric coated steel or iron should be properly protected against corrosion depending upon the critical nature of the structure. All buried metallic pressure piping such as ductile iron firewater pipelines should be protected against corrosion.

The chloride ion concentrations reflect none detected with a reporting limit of 15 mg/kg.

The sulfate ion concentrations are none detected and 20 mg/kg and are determined to be insufficient to damage reinforced concrete structures and cement mortar-coated steel at these locations.

The pH of the soils are 8.14 and 8.35, which does not present corrosion problems for buried iron, steel, mortar-coated steel and reinforced concrete structures.

The redox potentials are 100-mV and 130-mV. Both samples are indicative of potentially "moderately corrosive" soils resulting from anaerobic soil conditions.

This corrosivity evaluation is based on general corrosion engineering standards and is non-specific in nature. For specific long-term corrosion control design recommendations or consultation, please call *JDH Corrosion Consultants, Inc. at (925) 927-6630.*

We appreciate the opportunity of working with you on this project. If you have any questions, or if you require further information, please do not hesitate to contact us.

Very truly yours,
CERCO ANALYTICAL, INC.

for

J. Darby Howard, Jr., P.E.
President

JDH/jdl
Enclosure

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

Client: Ninyo & Moore
Client's Project No.: 404695001
Client's Project Name: Lucha & Sylvia Cassell Elementary Schools, 1711 E. San Antonio St. & 1300 Tallahassee Drive, San Jose, CA
Date Sampled: 2-Nov-23
Date Received: 9-Nov-23
Matrix: Soil
Authorization: Signed Chain of Custody

Date of Report: 14-Nov-2023

Job/Sample No.	Sample I.D.	Redox (mV)	pH	Conductivity (umhos/cm)*	Resistivity (100% Saturation) (ohms-cm)	Sulfide (mg/kg)*	Chloride (mg/kg)*	Sulfate (mg/kg)*
~~2311015-001~~	~~B-3/0.0-5.0'~~	~~100~~	~~8.35~~	-	~~4,800~~	-	~~N.D.~~	~~N.D.~~
2311015-002	CPT-1/0.0-5.0'	130	8.14	-	1,400	-	N.D.	20

Method:	ASTM D1498	ASTM D4972	ASTM D1125M	ASTM G57	ASTM D4658M	ASTM D4327	ASTM D4327
Reporting Limit:	-	-	10	-	50	15	15
Date Analyzed:	13-Nov-2023	10-Nov-2023	-	13-Nov-2013	-	13-Nov-2023	13-Nov-2023

* Results Reported on "As Received" Basis
N.D. - None Detected

Julia Clauson
Chemist

Quality Control Summary - **All laboratory quality control parameters were found to be within established limits**

APPENDIX E

Geophysical Survey

APPENDIX E

GEOPHYSICAL SURVEY

Scope

Ninyo & Moore performed a geophysical survey per school site using the refraction microtremor (ReMi) technique. The surveys were performed on October 25, 2023 along one line near the proposed location for the project improvements. The survey line location is shown on Figure 2.

Refraction Microtremor Survey

The ReMi method was used to develop a one-dimensional profile of shear wave velocity and evaluate the characteristic shear wave velocity to a depth of 100 feet below the ground surface (V_{s100}) for seismic site classification. The survey consisted of collecting microtremor array measurements (MAM) from surface waves using ambient noise as a passive source and an array of geophones along the line. The following sections provide a summary of the methods and analyses used in the ReMi survey. The seismic model results are provided on Figure E-1.

Field Methods

A Geode 24–Channel Seismograph (Geometrics Inc., San Jose, CA) was used for MAM surveying, with 4.5 Hertz (Hz) vertical component geophone placement every 10 feet for a total profile length of 230 feet. Approximately twenty records were collected, with a record length of 30 seconds (s) and 2 millisecond (ms) sample interval. The field data were digitally recorded in SEG2 format, reviewed in the field for data quality, saved to a hard disk, and documented.

Data Processing and Modeling

The MAM seismic data were processed using SeisImager (Geometrics Inc., San Jose, CA) seismic processing software. The dispersive characteristics of surface waves are used to evaluate the subsurface velocity at depth. Longer wavelength (that is, longer-period and lower-frequency) surface waves travel deeper and thus contain more information about deeper velocity structure. Shorter wavelength (that is, shorter-period and higher-frequency) surface waves travel shallower and thus contain more information about shallower velocity structure. The dispersion is dependent on the material properties, such as surface wave velocity, relative material densities, and Poisson's ratio. An inversion is performed on the collected passive seismic shear wave records within SeisImager to produce a model of the variation in shear wave velocities with depth. The following data processing flow was used to calculate Average Shear-wave Velocities (AVS) to a depth of approximately 100 feet (V_{s100}).

- Collated records into list file and edited any bad channels or records,
- Applied 2D Spatial Auto Correlation (SPAC); using a linear array and 24 geophones at 10 feet spacing,
- Phase velocity frequency transformation from 2 to 20 Hz,
- Automated velocity picks of raw phase velocity were calculated and updated manually,
- Created an initial model and carried out a non-linear Least Squares Method (LSM) inversion to produce a final shear wave velocity model; convergence of the inversion was judged whether the model achieved an RMS <5% within 5-7 iterations,
- Calculated V_{s100} using final shear wave velocity model.

Results

Shear wave data resolution generally decreases with depth, due to the loss of sensitivity of the dispersion curve to changes in shear wave velocity as depth increases. A figure showing our MAM seismic modeling result is provided in Figure E-1. The layered model in Figure E-1 indicates our interpretation of the approximate changes in shear wave velocity vertically with depth across the surveyed location.

The characteristic shear wave velocity (V_{s100}) at the LUCHA Elementary School project site, calculated from the model, is approximately 726 feet per second which is consistent with a Class D seismic site classification for stiff soil (ASCE, 2016).

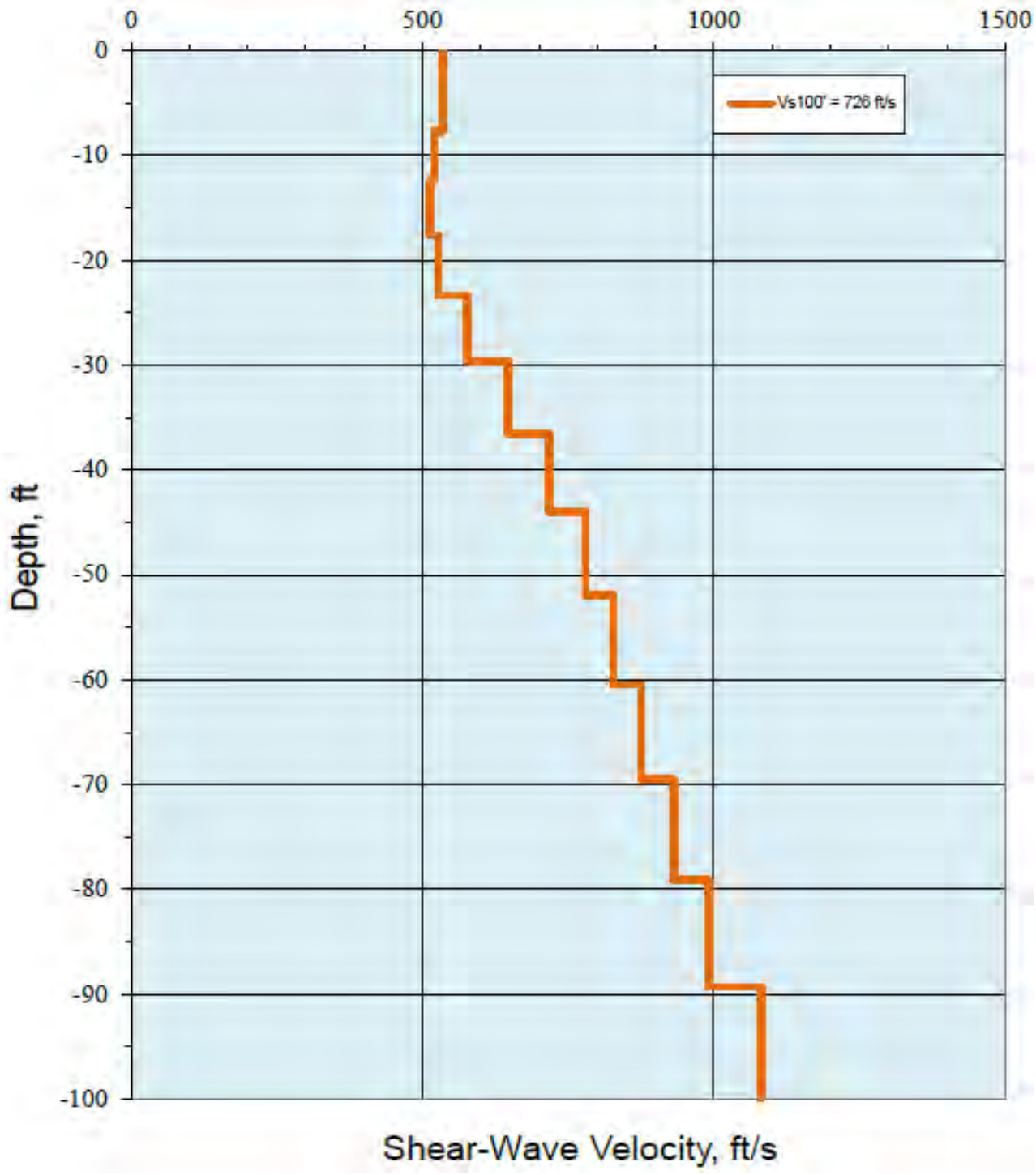


FIGURE E-1

SHEAR WAVE VELOCITY PROFILE

LUCHA ELEMENTARY SCHOOL
1711 EAST SAN ANTONIO STREET, SAN JOSE, CALIFORNIA

404695001 | 05/24

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Ninyo & Moore

REMI SHEAR WAVE CALCULATIONS

404695001

1711 East San Antonio Street
San Jose, California

Line 1

d_i	v_{si}	d_i/v_{si}
3.6	535.7	0.00667
4.1	534.0	0.00772
4.7	519.9	0.00898
5.2	512.8	0.01018
5.8	527.3	0.01094
6.3	576.1	0.01097
6.9	647.0	0.01062
7.4	717.0	0.01035
8.0	779.1	0.01023
8.5	827.4	0.01029
9.1	875.6	0.01035
9.6	930.9	0.01033
10.2	991.4	0.01025
10.7	1080.9	0.00991
	Average v_s	726

$$\overline{v_s} = \frac{\sum d_i}{\sum \frac{d_i}{v_{si}}}$$

Per ASCE 7-22: Equation 20.4-1

d_i = thickness of any layer between 0 and 100 feet

v_{si} = shear wave velocity in feet per second

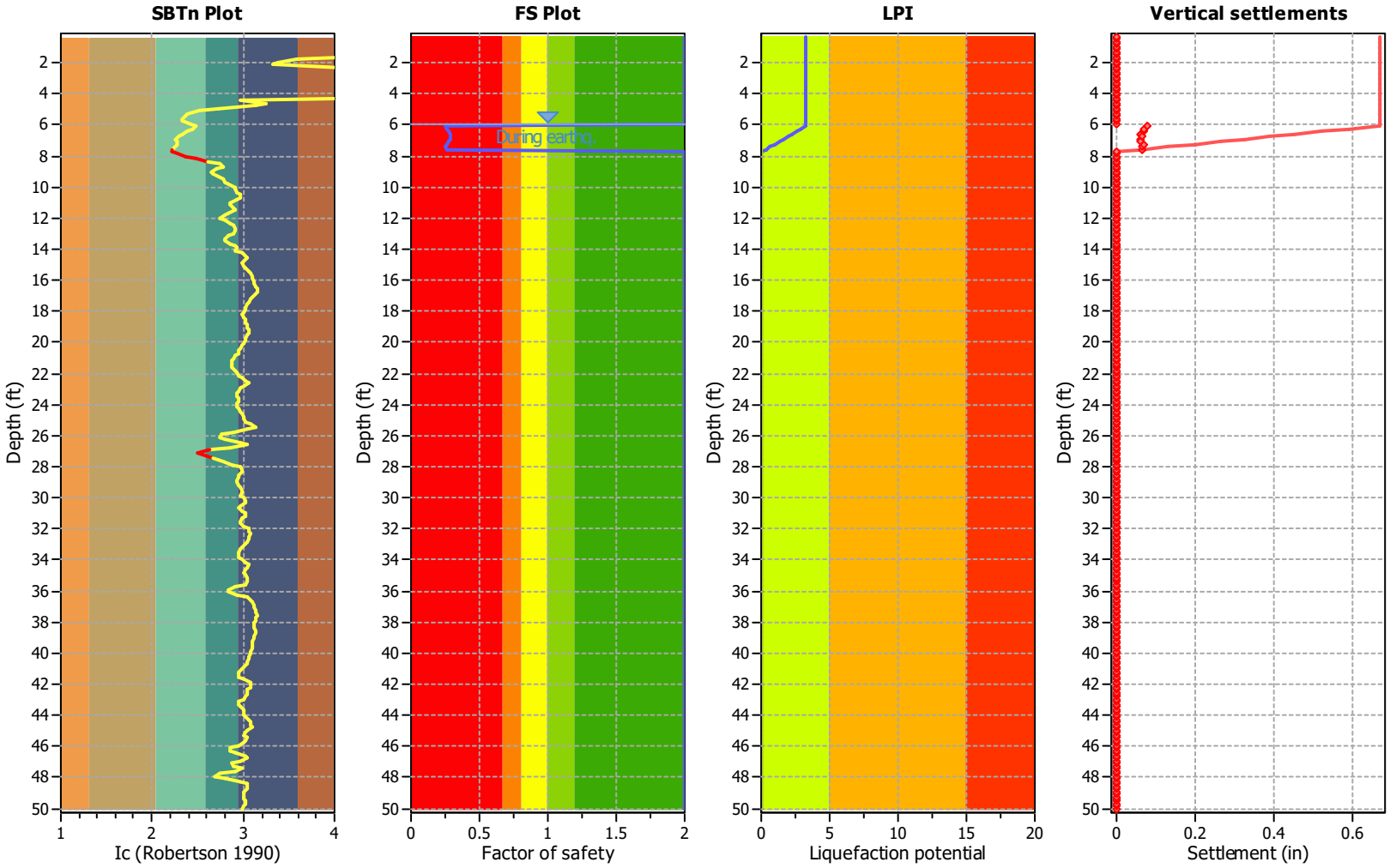
APPENDIX F

Calculations

Ninyo & Moore
2149 O'Toole Avenue, Suite 30
San Jose, CA 95131
https://ninyoandmoore.com

Project: **404695001 - Lucha Elementary School**
Location: **1711 East San Antonio Street, San Jose, California**

CPT: CPT-01
Total depth: 50.04 ft



Analysis method:	B&I (2014)	G.W.T. (in-situ):	6.00 ft	Use fill:	No	Clay like behavior applied:	.
Fines correction method:	B&I (2014)	G.W.T. (earthq.):	6.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	7.60	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.76	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		



2149 O'Toole Avenue, Suite 30 | San Jose, California 95131 | p. 408.435.9000

ARIZONA | CALIFORNIA | COLORADO | NEVADA | TEXAS | UTAH

ninyoandmoore.com

Ninyo & Moore

Geotechnical & Environmental Sciences Consultants