



# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

**BID AND CONTRACT DOCUMENTS**

**August 30, 2023**

**Rian Pinson, Purchasing Director**

## CONTENTS

Notice to Contractors Calling for Bids.....	SECTION 00020
Instruction for Bidders .....	SECTION 00100
Bid Schedule.....	SECTION 00200
Bid Forms .....	SECTION 00300
Bid Data Forms.....	SECTION 00400
Sample Agreement .....	SECTION 00500
Performance Bond .....	SECTION 00600
Payment Bond .....	SECTION 00610
General Conditions .....	SECTION 00700
Special Conditions .....	SECTION 00720
Escrow Agreement.....	SECTION 00740
Certifications to be Submitted with Bid .....	SECTION 00750
Certification of Compliance with DVBE Policy (if applicable) (00751)	
Bidders Acknowledgement of Project Schedule and Phasing (00752)	
Site Visit Certification (00753)	
Acknowledgement of Bidding Practices Regarding Indemnity (00754)	
Certifications to be Submitted with Agreement.....	SECTION 00755
Drug Free Workplace	
Alcohol & Tobacco	
Asbestos	
Fingerprinting	
Attachments:	
Fingerprinting & Badging Procedures.....	Attachment A
DVBE Forms.....	Attachment B
Technical Specifications.....	Attachment C
Plans/Drawings.....	Attachment D
Soil Report.....	Attachment E
DSA Approved Addenda .....	Attachment F
Map for Job Walk.....	Attachment G

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00020  
NOTICE TO CONTRACTORS  
CALLING FOR BIDS**

**DOCUMENT 00020**  
**NOTICE INVITING BIDS**  
**PURSUANT TO THE CALIFORNIA UNIFORM PUBLIC CONSTRUCTION COST**  
**ACCOUNTING ACT (PCC 22000 et seq.)**

**NOTICE IS HEREBY GIVEN** that the Governing Board of the Grossmont Union High School District ("District") is inviting qualified and experienced contractors to submit sealed bids for the construction project described below.

**CHILDCARE CENTER SHADE STRUCTURE PROJECT**  
**CN-3571**

**PLACE FOR SUBMITTING BIDS:** Bids must be delivered to the District at the following location: **Grossmont Union High School District Bond Trailer, 9600 ½ Milden Street, La Mesa, CA, 91942**

**BID DEADLINE:** Bids must be delivered to and received by the District at the location specified above as the place for submitting bids not later than the date and time specified below, at which time the District will publicly open and read all bids. Any bid received by the District after the Bid Deadline shall be returned to the bidder unopened. Bids must be received by the District no later than the following Bid Deadline: **September 20, 2023 at 2:00 pm**

**OBTAINING OFFICIAL BID DOCUMENTS:** Prospective bidders may secure a set of bid documents as of August 30, 2023 at <http://www.guhsd.net/Departments/Business-Services/Purchasing/Solicitations/index.html>

**SCOPE:** Install new shade structure and some site work.

**REQUIREMENTS FOR BID:** Bids must be submitted on the Bid Form provided by the District and included in the bid documents. Each bid must strictly conform with and be responsive to this Notice Inviting Bids, the Instructions for Bidders, and other Contract Documents. The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding. Except as provided in Public Contract Code Section 5100 *et seq.*, no bidder may withdraw a bid for a period of ninety (90) calendar days after the opening of the bids.

**DVBE:** This bid is NOT subject to Disabled Veteran Business Enterprise requirements but always encouraged. Minority, women, and disabled veteran contractors are encouraged to submit bids. District is required to have 3% percentage each year. Bidder must provide a DVBE prime or subcontractor at 3% or complete the Good Faith Efforts package.

**DIR REGISTRATION AND LABOR COMPLIANCE MONITORING:** Except as provided in Labor Code Section 1771.1(a), no Contractor or Subcontractor may be listed on a bid proposal for a public works project submitted on or after March 1, 2015, or perform work on a public works contract awarded on or after April 1, 2015, unless registered with the Department of Industrial Relations pursuant to California Labor Code Section 1725.5. This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Contractor and any Subcontractors engaging in work on the Project are required to review and comply with the provisions of the California Labor Code, Division 2, Part 7, Chapter 1, beginning with Section 1720, and the regulations of the Department of Industrial Relations implementing those provisions. These statutory and regulatory provisions contain specific requirements concerning, for example, the determination and payment of prevailing wages, retention, inspection and auditing of payroll records, use of apprentices, payment of overtime compensation, and various



penalties or fines which may be imposed for violations of the requirements of the chapter. Submission of a bid proposal constitutes the bidder's representation that it has thoroughly reviewed these statutory and regulatory requirements and agrees to bind every Subcontractor performing work on the Project to these requirements to the extent such requirements are applicable to the Subcontractor's work.

**REQUIRED BID SECURITY:** Each bid must be submitted with security in an amount not less than ten percent (10%) of the maximum bid amount as a guarantee that the bidder will enter into the proposed contract, if awarded to the bidder, and will provide the performance and payment bonds, insurance certificates and other documents described in the Contract Documents. Such security must be in one of the following forms: (1) a cashier's check made payable to the District; (2) a certified check made payable to the District; or (3) a bond made payable to the District in the form set forth in the Contract Documents. Any bond must have been issued by a California-admitted surety as defined in Code of Civil Procedure Section 995.120

**REQUIRED CONTRACTOR LICENSE:** The class(es) of California contractor's license(s) required in order to bid on and perform the contract for this Project is:

B

**MANDATORY PRE-BID CONFERENCE AND SITE VISIT:** The District will conduct a pre-bid conferences and site visits on **September 7, 2023 at 9:00 am** for the purpose of acquainting all prospective bidders with the bid documents and the work site. Attendance is mandatory, and any bidder that does not attend will be disqualified from work on the Project. The pre-bid conference(s) will begin **at the East side of Grossmont High School, 1100 Murray Drive, 92020.**

**DISTRICT STANDARDS:** The District has made a finding that certain brand or trade names are necessary in order to maintain conformity among its campuses, compatibility with existing systems, and to streamline maintenance and parts storage.

**PERFORMANCE AND PAYMENT BONDS:** The successful bidder will be required to provide both a performance bond and a separate payment bond, each in an amount equal to 100% of the total contract amount. The forms of the bonds are set forth in the Contract Documents and all bonds must be issued by a California-admitted surety as defined in California Code of Civil Procedure Section 995.120.

**PREVAILING WAGES:** The Project is a public work and the successful bidder and each of its subcontractors of any tier will be required to pay not less than the general prevailing rates of per-diem wages in the locality in which the work is to be performed for each craft or type of worker needed to execute the contract ("Prevailing Wages"). A copy of the per-diem rates of Prevailing Wages applicable to the Project is on file and available for review at the location specified above as the place for submitting bids, and a copy will be posted at the site of the Project. Wages can be found at <http://www.dir.ca.gov/OPRL/PWD/Index.htm>.

**SUBCONTRACTORS:** Bidder shall include the name, location of the place of business, and the California contractor license number of each subcontractor who will perform work or assist the bidder in completing the Project, pursuant to the Subletting and Subcontracting Fair Practices Act. An inadvertent error in listing the contractor license number shall not be grounds for filing a bid protest or grounds for considering a bid nonresponsive, assuming the corrected contractor's license number is submitted by the bidder within twenty-four (24) hours after the bid opening and the corrected contractor's license number corresponds to the submitted name and

location for that subcontractor.

District Contact: Rian Pinson, Director of Purchasing, [rpinson@guhsd.net](mailto:rpinson@guhsd.net)

Construction Estimate: \$375,000

Dated this 30 day of August, 2023

Clerk of the Governing Board  
Grossmont Union High School District,  
of San Diego County, California

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00100  
INSTRUCTIONS FOR  
BIDDERS**

(00100)  
**INSTRUCTIONS FOR BIDDERS**

**WARNING:** READ THESE INSTRUCTIONS FOR BIDDERS AND OTHER CONTRACT DOCUMENTS CAREFULLY. DO NOT ASSUME THAT THE DOCUMENTS ARE THE SAME AS SIMILAR DOCUMENTS YOU MAY HAVE SEEN, EVEN IF PREVIOUSLY PROVIDED BY THE DISTRICT.

1. **Review of Plans and Specifications.** Each bidder, at its own expense and prior to submitting its bid, shall thoroughly review and become familiar with all of the plans and specifications for the Project. A bidder is required to review the plans and specifications only in its capacity as a contractor, not as a licensed design professional. Each bidder must report to the District any errors or omissions in the plans and specifications revealed through such review.
2. **Examination of Project Site and Contract Documents.** Each bidder, at its own expense and prior to submitting its bid, shall visit the site of the Project and become fully acquainted with the conditions relating to the construction and labor so that the bidder fully understands the facilities, difficulties, and restrictions attending the execution of the work under the contract. Subject to District approval and evidence satisfactory to the District of adequate insurance coverage, any bidder that has attended the Mandatory Pre-Bid Conference specified in the Notice Inviting Bids, at its sole cost, may subsequently conduct additional site visits or inspections. These Instructions for Bidders do not constitute a comprehensive statement of all requirements applicable to the Project; therefore, each bidder shall thoroughly examine and become familiar with the drawings, specifications, form of agreement, forms of the required bonds, insurance endorsements and other "Contract Documents" defined in the Form of Agreement. A bidder's failure to obtain and/or thoroughly examine any drawing, specification, form, instrument, addendum or other contract document, or to visit the site and become acquainted with conditions there-existing, shall not relieve the bidder from any obligations with respect to its bid or the contract. The submission of a bid shall be taken as a representation and warranty by the bidder that it has complied with the requirements of this Section. At no time after submitting a bid may the bidder dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done in connection with the Project.
3. **Interpretation of Contract Documents.** If a bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in or omissions from the drawings and specifications, the bidder may submit to the District a written request for an interpretation or correction thereof. The bidder submitting the request shall be responsible for its prompt delivery. Prior to the opening of bids, interpretations or corrections of the Contract Documents will be made only by addendum duly issued by the District. Copies of each addendum will be posted so that each contractor can obtain a copy. No person is authorized to provide any oral interpretation of any provision in the Contract Documents, and no oral interpretation shall be binding on the District. If discrepancies in or conflicts between the drawings and specifications are not addressed in any addenda, the bidder shall include in its bid the methods of construction and/or materials resulting in the higher bid amount.
4. **Ethics in Bidding.** The District expects each bidder to maintain high ethical standards with respect to bidding on the Project. Prior to the award of a contract for the Project, no

bidder shall disclose the amount of any prospective subcontractor's bid or proposal, or any element thereof, to any other prospective subcontractor. Bidders shall not engage in or permit the unethical and unfair practices commonly referred to as bid shopping (e.g., the bidder uses a subcontractor's proposal in attempts to obtain a lower-cost proposal from another subcontractor) and bid peddling (e.g., a subcontractor attempts to obtain a job by offering to work for less than the amount specified in another subcontractor's proposal). If the District determines prior to opening of bids that any bidder has violated any of the foregoing requirements or any other prohibitions set forth in the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 *et seq.*), the District may reject the bidder's bid as non-responsive and report the bidder's actions to the Contractors State License Board.

5. **Contractor Licensing.** Each bidder must be properly licensed in the State of California and "in good standing" at the time of submitting its bid to the District. Failure to satisfy this requirement shall result in the bidder being deemed non-responsive and the bidder will be disqualified from work on the Project. Each bidder must clearly specify its California contractor's license number where indicated in the bid form. The bidder to which the District awards a contract for the Project must maintain the required license(s) specified in the Notice Inviting Bids throughout the duration of the Project.
6. **Listing Subcontractors.** As required pursuant to the Subletting and Subcontracting Fair Practices Act, each bidder shall submit with its bid a list of the names and locations of the places of business of each subcontractor that will perform work or labor or render service to the bidder in or about the Project, or that, under subcontract to the bidder, will specially fabricate and install a portion of the work, in an amount in excess of one-half of 1 percent of the total amount of the bidder's bid. A bidder may not list more than one subcontractor for any one portion of the work. A bidder that fails to list a subcontractor for any portion of the work represents that it is fully qualified to and shall perform such work using its own forces. If the bid documents require the bidder to submit alternate bids and the bidder intends to use different or additional subcontractors for the alternates, the bidder must submit a separate list of subcontractors for each such alternate. A bidder shall submit the lists of subcontractors only on the form included in the bid documents. In addition to providing the subcontractor lists, within one business day after the bids are opened, each bidder must provide the address, telephone number and contractor license number for each listed subcontractor.
7. **Use of Bid Form is Mandatory.** Each bid must be submitted on the Bid Form included in the bid documents. Changes in or additions to the Bid Form, recapitulations of the work for which the bid is submitted, alternative proposals, and other modifications of the Bid Form or any of the documents to be submitted with the bid are prohibited unless specifically called for in the Contract Documents.
8. **Preparing the Bid.** Bidders must fully and properly complete all information required to be included on the Bid Form. Amounts must be stated in both words and numerals where indicated. Prices, wording and notations must be in ink or typewritten. The signatures and/or initials of each person signing the bid and other documents to be submitted with the bid must be in permanent, preferably blue, ink.
9. **Correcting the Bid.** Bids may contain an erasure, interlineation, or other correction only if the correction does not result in any inconsistency or ambiguity and the correction is authenticated by affixing in the margin immediately opposite the correction the initials of

the person or persons signing the bid. In the event of inconsistency between words and numerals, words shall govern over numerals.

- (a) **Mandatory Forms to Include in Bid.** Each bidder shall complete and submit with its Bid Form each of the forms specified on the bid form, which are included in the bid documents. A bidder's failure to properly complete and submit any such mandatory form may render the bidder's bid non-responsive to the Notice Inviting Bids.
10. **Signing the Bid and Other Required Forms.** The Bid Form, bonds, subcontractors lists, contractor's certificates, attachments to the Agreement Form, guarantees and other documents requiring an original signature of the bidder must be signed in permanent, preferably blue, ink by a person or persons duly authorized to sign the document. The District may reject as non-responsive any Bid Form containing a stamped or mechanically-printed signature. Depending on whether the bidder is an individual or the type of business entity, signatures must comply with the following:
- (a) **Corporations:** If bidder is a corporation, each document shall set forth the legal name of the corporation and shall be signed by both the bidder's President and the bidder's Secretary or Assistant Secretary. Alternatively, the signature of other authorized officers or agents may be affixed to the document if the bidder has included with its bid a certified copy of the resolution of the corporate board of directors authorizing such officers or agents to sign the document. Such documents shall include the title of each such signatory below the signature and shall bear the corporate seal.
  - (b) **Limited Liability Companies:** If bidder is a limited liability company, each document shall set forth the true name of the company and the names of all members of the company, and all such members shall sign the document. Alternatively, the document may be signed by a managing member of the company if the bidder has included in its bid a certified copy of a statement of the limited liability company acknowledging the signatory as a managing member with authority to sign the document.
  - (c) **Partnerships:** If bidder is a partnership of any type, each document shall set forth the true name of the partnership and the names of all persons comprising the partnership, and all such persons shall sign the document. Alternatively, the document may be signed by a general partner of the partnership if the bidder has included in its bid a certified copy of a statement of the partnership acknowledging the signatory as a general partner with authority to sign the document.
  - (d) **Sole Proprietorships:** If the bidder is a sole proprietorship, each document must set forth the true name of the sole proprietorship and its owner, and such owner must sign the document. Alternatively, an agent of the owner may sign a document if the bidder has included in the bid a certified copy of a current and valid power-of-attorney authorizing the agent to sign the document.
  - (e) **Fictitious Names and Joint Ventures:** If the bidder is an entity using a fictitious business name or a joint venture of two or more other parties,

documents must satisfy the requirements set forth above for signatures on behalf of corporations and partnerships, as applicable. The signature on any document signed on behalf of any entity using a fictitious business name must so indicate in the signature block. Documents submitted by parties acting as joint venturers must so indicate in the signature block and must be signed by or on behalf of each and every joint venturer.

11. **Sealing and Marking the Bid.** The completed Bid Form and all additional documents and other materials to be submitted with the bid in accordance with the Contract Documents shall be enclosed in a sealed envelope. The bidder shall plainly and clearly mark the outside of the envelope with the bidder's name, address, telephone number, bidder's contractor's license number and the bid package for which the bid is submitted. No other information shall be apparent on the outside of the envelope. The District may reject any bid if the outside of the envelope is improperly or incompletely marked.
12. **Delivering the Bid.** For purposes of the Notice Inviting Bids and these Instructions for Bidders, any reference to the "Bid Deadline" shall mean the date and time specified as the Bid Deadline in the Notice Inviting Bids and any authorized extension thereto. Bids must be delivered to and received by the District at the location specified as the place for submitting bids and by the Bid Deadline. The clock located in the District Bond Trailer and designated as the official clock for bidding purposes shall be used in determining whether bids have been timely delivered and received by the District. Each bidder is solely responsible for ensuring that its bid is timely delivered to and received by the District. At no time will District telephones or facsimile machines be available for use by bidders. Any bid received by the District after the Bid Deadline will be returned to the bidder unopened.
13. **Submitting Bids for Multiple Bid Categories.** If the District is seeking bids for other bid categories related to the Project, bidders may submit bids for more than one bid category. However, the bid for each bid category must be complete unto itself and shall not be dependent on the award, price or some other conditional provision relative to any other separate bid category. No combination bids of any type will be accepted unless expressly permitted in the bid documents.
14. **Interest in More Than One Bid and Unqualified Bidders.** No person or entity shall submit or have any interest in more than one prime bid for the same work except to the extent the bid documents expressly call for alternate bids. The District will not accept more than one bid for the same work from any person or entity, under the same or different names. A reasonable belief by the District that any person or entity has an interest in more than one bid or has submitted more than one bid for the same work on the Project may result in the District rejecting all bids in which the bidder has an interest. A person or entity that has submitted a sub-bid or proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a sub-bid or proposal to other bidders, but the person, firm or corporation is prohibited from submitting a prime bid for the same bid category. The District will not accept any combination bids unless expressly permitted in the bid documents. No person or business entity that has participated in the preparation of any contract specifications shall be permitted to bid on the Project, and any such bid received by the District shall be deemed non-responsive.
15. **Modifying a Bid.** Prior to the Bid Deadline, a bidder may modify its bid by submitting the written modification to the District, in a sealed envelope, which must be received by the District not later than the Bid Deadline. The envelope shall be marked in the same manner

as provided in these Instructions For Bidders for the original bid, but shall also include the words "Bid Modification" on the outside of the envelope. The District may reject any modified bid if the modification is not received by the District prior to the Bid Deadline or if it creates an ambiguity or inconsistency, including, without limitation, if the modified bid is unintelligible. In lieu of submitting a modification, a bidder may withdraw its original bid in accordance with these Instructions For Bidders and submit a new bid for the Project, in which case the outside of the sealed envelope shall be marked with the words "Superseding Bid" in addition to the other required information. The bidder must submit any modification or superseding bid in writing to the District via personal or other delivery. The District will not accept oral modifications or superseding bids, and will not accept any modifications or superseding bids sent via facsimile or electronic transmission. Any modification or superseding bid must be delivered to and received by the District prior to the Bid Deadline.

16. **Withdrawing a Bid.** A bidder may withdraw its bid at any time prior to the Bid Deadline, either personally or by written request received by the District prior to the Bid Deadline. In such event, the District shall return the withdrawing bidder's bid security upon request. Except as provided in Public Contract Code Section 5100 *et seq.*, in no event may a bidder withdraw its bid during the period after opening of bids that is specified in the Notice Inviting Bids.
17. **Requesting Substitution of Specified Item.** Unless the Contract Documents provide in any particular case that substitution is not permitted, if the Contract Documents call for any specific concern, material, product, thing or service, such specification shall be interpreted as if followed by the words "or equal." Unless provided otherwise in the Contract Documents, a bidder may offer in place of any item specified in the plans, drawings or other Contract Documents ("Specified Item") any material, process, article, *et cetera* that the bidder can demonstrate is materially equal or better in every respect to the Specified Item and that will completely accomplish the purpose of the Contract Documents. Requests for substitution must be made in writing on the Substitution Request form included in the bid documents or available from the District ("Request Form"). Each substitution request is subject to and must conform with the requirements of Sections 3.10.4.3, 3.10.4.4, and 3.10.4.5 of the General Conditions, including, without limitation, requirements for submitting documentation in support of the request. Substitution requests must be submitted to the District not later than the date located on the Bid Schedule specified in the Notice Inviting Bids. The District will not consider any substitution requests received after such date except to the extent provided in Section 3.10.4.2 of the General Conditions.

The bidder is solely responsible for establishing that a proposed substitution satisfies all requirements of the Contract Documents, including, without limitation, that the proposed substitute item is equal to or better than the Specified Item in all material respects. The bidder must provide with the Request Form, at a minimum, all information required in accordance with Section 3.10.4.4 of the General Conditions to substantiate the request. The District may at any time request any additional information regarding the proposed substitute item. The District, in consultation with the Architect and the Construction Manager as applicable, will decide whether to approve a substitution based on the information provided by the bidder. The District has the sole discretion to determine whether a proposed substitute item is equal to or better than a Specified Item. Any request for substitution that is granted by the District shall be documented and processed by means of a Change Order after execution of the contract. The District may condition its



approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. The bidder shall be responsible for and shall bear any and all risks, expenses and costs of delay arising from review or approval of a substitution by the DSA or other governmental agency.

SUBMISSION OF A SUBSTITUTION REQUEST AND SUBSTANTIATING DATA SHALL IN NO WAY OBLIGATE THE DISTRICT TO REVIEW THE REQUEST OR DATA PRIOR TO AWARD OF A CONTRACT FOR THE PROJECT. IF THE DISTRICT AWARDS A CONTRACT FOR THE PROJECT TO A BIDDER AND SUBSEQUENTLY REJECTS A SUBSTITUTION PROPOSED BY SUCH BIDDER, THE BIDDER MUST PROVIDE THE SPECIFIED ITEM IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AT NO ADDITIONAL COST TO THE DISTRICT.

18. **District Waiver of Bid Irregularities.** The District, in accordance with applicable law, may waive any minor irregularity or informality in any bid or in the bidding.
19. **District Rejection of Irregular Bids.** The District will reject as non-responsive to the Notice Inviting Bids any bids containing irregularities that are not minor irregularities, including, by way of example and not as a limitation, bids that are materially incomplete, bids submitted on forms that have been materially altered, and bids that include any additions or conditional or alternate bids not called for or permitted in the bid documents. In addition, the District may reject as non-responsive to the Notice Inviting Bids any bid in which the bid amounts are obviously unbalanced or inconsistent. The District may, but is not required to, seek information from any bidder that may resolve an ambiguity in the bidder's bid.
20. **District Rejection of Non-Responsive Bids.** If a bid fails to conform to requirements set forth in the Notice Inviting Bids, these Instructions For Bidders, or any of the other Contract Documents (including, without limitation, if the District determines that the bid is unintelligible, internally inconsistent, or ambiguous), the District may reject the bid as not responsive to the Notice Inviting Bids. The District may, but is not required to, seek information from any bidder that may resolve an ambiguity in the bidder's bid.
21. **Bidder Evidence of Responsibility.** In determining whether a bidder is a "responsible" bidder, the District will consider, among other possible factors, the financial standing and general competency of the bidder with respect to the work being bid. If the District is considering awarding a contract for the Project to a bidder, the bidder, within two business days of the District's request, shall provide reasonable evidence of the bidder's construction experience, current and anticipated workload, organization available for the performance of the contract, any terminations from projects prior to completion, references for public works, financial resources, surety and insurance claims experience, stop notice and other legal proceedings, and other factors pertinent to determining the responsibility of the bidder.
22. **District Award of Contract.** In its discretion, the Governing Board may award a contract for the Project to a responsive bidder, or the Governing Board may reject all bids and may (but is not required to) rebid the Project. If the Governing Board awards a contract for the Project, the award will be to the responsible and responsive bidder with the lowest bid from among the bidders responsive to the Notice Inviting Bids. If two or more responsive and responsible bidders have submitted the same low bid, the District shall determine the lowest bidder by means of a coin toss or some other random method.

23. **Bidder Execution of Contract.** The bidder to which the District awards a contract for the Project shall **be sent a Preliminary Notice of Award and shall have ten (10)** calendar days after notification of the award to execute and deliver to the District the contract and all other documents required in accordance with the Contract Documents. If the bidder fails to execute and provide all such documents within that period, the bidder will forfeit the bid security submitted with its bid in accordance with the Notice Inviting Bids. In such event, the District may award the contract to the next lowest responsible and responsive bidder or release all bidders.
24. **Filing Bid Protests.** A bidder may protest the bidding process, another bid and/or the intended award of a contract for the Project only by filing a written protest with the District's Deputy Superintendent of Business Services in accordance with the procedures set forth in this Section. The District will not consider any verbal protests (e.g., by telephone) or any protests sent by electronic mail (e-mail). In order for a protest to be valid and be considered by the District the protest must:
- (a) be filed not later than 4:00 p.m. on the fifth business day following the opening of bids;
  - (b) clearly identify the bidder on whose behalf the protest is being filed, together with the name, address and telephone number of the person representing the bidder for purposes of the protest;
  - (c) clearly identify the specific bidding process, bid, or award of contract being protested;
  - (d) clearly identify and describe in detail the specific basis or bases for the protest and all facts relevant thereto and in support thereof;
  - (e) clearly identify all references to the specific portions of all documents relevant to the protest;
  - (f) clearly identify and describe in detail all arguments in support of the protest, including, not as a limitation, citations to all legal authorities; and
  - (g) be submitted with all documentation that is relevant to and supports the basis or bases underlying the protest.

If a protest filed by a bidder does not comply with each and every one of the foregoing requirements, the District will reject the protest as invalid. If a bidder files a valid protest, the District shall review the protest and all relevant information and documents and will provide written decision to the protesting bidder. In response to a protest, the Governing Board may decline to award a contract, may award a contract to a bidder other than as previously intended, or may award a contract to a bidder as previously intended despite the protest. Such action by the Governing Board shall be a condition precedent to the filing of any claim or demand and to the initiation of any action (legal or equitable) or other proceeding arising from the matter(s) protested.

COMPLIANCE WITH THE FOREGOING REQUIREMENTS IS MANDATORY. Each bidder that desires to protest must file a protest in accordance with the foregoing requirements, and no bidder may rely on a protest by another bidder as a means of satisfying such requirements. Compliance with the foregoing requirements is the sole and exclusive means of protesting the bidding process, any bid, and/or the intended award of a contract for the Project, and failure to so comply shall be deemed and construed as a waiver of any and all rights the bidder may have to pursue a claim, demand or action based on the bidding, any bids, and/or any contract awarded for the Project.

25. **Public Works Project.** The Project is a “public work” and “public project” within the meaning of, and, therefore, is subject to, various provisions of the Public Contract Code, Labor Code, Civil Code, and other legal requirements applicable to public works and public projects. The Contract Documents include various provisions relating to public works and public projects as provided by law, and each bidder must thoroughly review and become familiar with the Contract Documents as described above in these Instructions For Bidders. However, the provisions of the Contract Documents are not comprehensive statements of all requirements of law applicable to public works and public projects, and each bidder so acknowledges by submitting a bid for the Project. In addition, by submitting a bid for the Project, each bidder represents and warrants that it is familiar and knowledgeable with respect to all requirements of law applicable to public works and public projects generally and to the Project specifically.
26. **Subcontractor Eligibility and Licensing.** The bidder to which the District awards a contract for the Project shall in no event permit a subcontractor to perform any work in connection with the Project if that subcontractor is ineligible to work on a public works or public project. Each subcontractor that the bidder intends shall perform any work in connection with the Project must be licensed in accordance with law prior to commencing any work on the Project.
27. **Labor Compliance and Prevailing Wages.** The contract awarded for the Project is subject to the District’s labor compliance program. The bidder to which the District awards a contract for the Project, and each of that bidder’s subcontractors of any tier, shall be required to pay not less than the general prevailing rates of per-diem wages in the locality in which the work is to be performed for each craft or type of worker needed to execute the contract (“Prevailing Wages”). The successful bidder must retain copies of certified payrolls for a minimum of five years from the date of completion and submit the upon request of the District or its authorized agent. A copy of the per-diem rates of Prevailing Wages shall be posted at the site of the Project. Rates are available at <http://www.dir.ca.gov/dlsr/pwd/index.htm> . For projects bid after 1/12/12, contractors and subcontractors shall provide certified payroll records and any other required or requested labor compliance documentation to the Department of Industrial Relations’ Compliance Monitoring Unit (“CMU”), with a copy to the Facilities Department on or before the first business day of each month or in the manner required by the CMU. Failure to timely submit payroll records may result in debarment by the Labor Commissioner.
28. **Certified Payroll.** This project is subject to the requirements under SB 854, which include registration of all contractors, and the submission of certified payroll to the State of California. Additionally, GUHSD requires all contractors to submit their certified payroll into LCP Tracker software monthly, for District purposes.
29. **Apprenticeable Trades and Crafts.** Not later than two calendar days after receiving notice of the award of the contract for the Project, the bidder to which the District awards the contract must provide written notice to the District in regard to whether, as described in Labor Code Section 1777.5, workers in any apprenticeable trade or craft will be employed on the Project.
30. **Fingerprinting and Employee Background Checks.** In circumstances that may involve workers having more than limited contact with students, the District may require that all workers on the Project (including, without limitation, employees of the bidder and its

subcontractors) undergo criminal-history background checks requiring submission of fingerprints to the Department of Justice. The District may impose other requirements designed to protect students regardless of whether it requires such criminal-history background checks. The bidder to which the District awards a contract for the Project shall be responsible for compliance with any and all such requirements by its own forces and by its subcontracted forces.

31. **Anti-Discrimination Policy.** It is a policy of the District that, in connection with any work performed under contract, there shall be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, or marital status. No bidder shall discriminate in violation of applicable law in preparing and submitting its bid for the Project. The bidder to which the District awards a contract for the Project will be required to comply with applicable federal and California laws prohibiting such discrimination and to require like compliance by any subcontractors employed on the Project by such bidder.
32. **Project Duration and Liquidated Damages.** The bidder to which the District awards a contract for the Project must complete the Project in accordance with the Contract Documents and within the time period specified in the Special Conditions. Failure of such bidder to fully complete the Project within such time period, or to complete any portion thereof in accordance with any applicable schedule for the Project, may result in the District assessing liquidated damages against the Contractor as provided in the Special Conditions.
33. **Construction Manager.** If the District uses a Construction Manager for the Project, the Construction Manager will be identified in the Special Conditions and the role of the Construction Manager will be as specified in detail in the General Conditions and is subject to provisions of the agreement between the District and the Construction Manager. The Construction Manager will be the District's representative during construction and close-out of the Project and will assist the District in the administration of the contract for the Project. In addition, the Construction Manager may assist the District with the bidding process for the Project. Communications from the District to bidders prior to award of a contract for the Project may be directed through the Construction Manager.
34. **Project Architect.** The Architect for the Project is identified in the Special Conditions, and the role of the Architect will be as specified in detail in the General Conditions and is subject to the provisions of the agreement between the District and the Architect. The Architect will be the District's representative during construction and close-out of the Project in accordance with Title 24 of the California Code of Regulations and provisions of the agreement between the District and the Architect. Communications from the District to bidders prior to award of a contract for the Project may be directed through the Architect.
35. **Badging.** Please see the Fingerprinting and Badging Procedures for the District requirements for all contractors on school sites. If your entity can not secure an ORI number and required paperwork by start of construction, your company will be responsible for paying associated costs for the required individuals to oversee this project.

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

**SECTION 00200  
BID SCHEDULE**

## BID SCHEDULE

### CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571

Advertising Dates	August 30 and September 6, 2023
Mandatory Pre-bid Conference & Sitewalk	September 7, 2023 at 9:00 am
Substitution Requests Due	September 12, 2023
Questions due from Bidders	September 12, 2023
<b>FINAL</b> Addendum to Bidders	September 15, 2023
<b>Open Bids</b>	<b>September 20, 2023 at 2:00 pm</b>
Protest Period Ends	September 27, 2023
<b>Preliminary</b> Notice of Award	September 28, 2023
<b>Governing Board – Bid Award</b>	<b>October 10, 2023</b>
Contract Submittals due to District	October 6, 2023
Preconstruction/LCP Meeting	TBD
Technical Submittals due to Architect	As requested by CM
Notice to Proceed	After Board meeting when all documents signed
<b>Start Date:</b>	<b>October 16, 2023</b>
<b>Project Completion Date:</b>	<b>February 16, 2024</b>
Estimate:	\$ 375,000

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00300  
CONTRACT BID FORMS**

**(00300)**  
**BID FORM**

COMPANY NAME: \_\_\_\_\_

TO: Grossmont Union High School District, acting by and through its Governing Board, herein called the "District":

1. Pursuant to and in compliance with your Notice to Contractors Calling for Bids and the other documents relating thereto, the undersigned bidder, having thoroughly examined and familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract and the cost of the work at the place where the work is to be done, and with the drawings and specifications and other contract documents, hereby proposes and agrees to perform, within the time stipulated, the contract, including all of its component parts, and everything required to be performed, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with the:

**CHILDCARE CENTER SHADE STRUCTURE PROJECT**  
**CN-3571**

all in strict conformity with the drawings and specifications and other contract documents, including addenda nos. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, on file at the office of Assistant Superintendent, Business Services of District for the sum of:

**BASE BID:**

\_\_\_\_\_ Dollars and  
\_\_\_\_\_ Cents.

(\$\_\_\_\_\_). Said sums includes all applicable taxes and costs.

**ALLOWANCE(S):**

Allowances for work not included in the plans and specifications: (to be used at the direction of the District or its representative):

Unforeseen Soil Conditions	\$	10,000
Unforeseen Drainage Issue	\$	10,000
<b>Total Allowances:</b>		<b>\$20,000</b>



**TOTAL EXTENDED BID PRICE (BASE + ALLOWANCE):**

\_\_\_\_\_ Dollars and  
\_\_\_\_\_ Cents.

(\$\_\_\_\_\_). Said sums includes all applicable taxes and costs. And is the basis for award.

2. It is understood that the District reserves the right to reject this bid and that this bid shall remain open and not be withdrawn for the period specified in the Notice to Contractors Calling for Bids.
3. The following forms are to be submitted with the bid. Failure to submit these forms may render the bid non-responsive:
  - a. Bid Security Form (bid bond) or Bid Guarantee Form (no bid bond) - 00410
  - b. Proposed Subcontractors Form (for listing subcontractors) – 00430
  - c. Non-Collusion Affidavit – 00480
  - d. Information Required of Bidder – 00490
  - e. Certification of Compliance with DVBE Policy (if applicable)- 00751
  - f. Bidder's Acknowledgment of Project Schedule and Phasing - 00752
  - g. Site Visit Certification - 00753
  - h. Acknowledgment of Bidding Practices Regarding Indemnity – 00754
  - i. DVBE and/or GFE – Attachment B
4. It is understood and agreed that bidder shall provide the addresses, telephone numbers, and license numbers of all listed subcontractors within one business day of bid opening or bidder's bid may be rejected as nonresponsive.
5. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a contract in the form attached hereto in accordance with the bid as accepted. The undersigned will also furnish and deliver to the District the Performance Bond and Payment Bond for Public Works as specified, all within **ten (10)** calendar days after receipt of the Preliminary Notice of Award. The work under the contract shall be commenced by the undersigned bidder, if awarded the contract, on the date to be stated in the District's Notice to the Contractor to Proceed, and shall be completed by the Contractor in the time specified in the contract documents.
6. Notice of acceptance or requests for additional information should be addressed to the undersigned at the address stated below:

**Owner**

Grossmont Union High School District  
Attn: Rian Pinson  
Director, Purchasing  
1100 Murray Drive  
El Cajon, CA 92020  
619-644-8051 Fax 619-460-0963

**With Copies to:**

Erickson Hall  
Attn: Zach Lawrence  
Zlawrence@ericksonhall.com

7. The names of all persons interested in the foregoing proposal as principals are as follows:

\_\_\_\_\_  
—  
\_\_\_\_\_  
—

\_\_\_\_ (IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a copartnership, state true name of firm, also names of all individual copartners comprising the firm; if bidder or other interested person is an individual, state first and last names in full.)

8. Bidder certifies that he is licensed in accordance with the law providing for the registration of Contractors, License No. \_\_\_\_\_, Expiration Date \_\_\_\_\_, class of license \_\_\_\_\_. Copy of bidders wallet license is **attached hereto**.

I, \_\_\_\_\_, the \_\_\_\_\_ of the bidder, hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted by the bidder in connection with this bid and all of the representations made herein are true and correct.

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ at County, California.

Proper Name of Bidder \_\_\_\_\_

By

\_\_\_\_\_

\_\_\_\_\_  
Signature of Bidder

**NOTE:** If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of at least one authorized officer or agent and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his or her signature shall be placed above.

Company Name: \_\_\_\_\_

Business Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Contact E-mail: \_\_\_\_\_

Telephone: (     ) \_\_\_\_\_

Facsimile: (     ) \_\_\_\_\_

DIR Number: \_\_\_\_\_

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

### **SECTION 00400 BID DATA FORMS**

Bidder shall submit its Bid data in accordance with the format shown on each of the following Bid Data Forms. Bidders shall prepare and use as many sheets as are necessary to adequately provide the information required. Bidder shall ensure that every page of its Bid Data Forms are properly identified with the Bidder's name and page number.

(00410)  
**BID BOND**

KNOW ALL MEN BY THESE PRESENTS:

THAT

\_\_\_\_\_, as  
Principal, and \_\_\_\_\_, as  
Surety, are held firmly bound unto the **GROSSMONT UNION HIGH SCHOOL DISTRICT**  
(hereinafter called the DISTRICT) in the sum of

\_\_\_\_\_ DOLLARS (\$\_\_\_\_\_), being not less than ten percent (10%) of the Total  
Bid Price; for the payment of which sum will and truly to be made, we bind ourselves, our heirs,  
executors, administrators, successors, and assigns, jointly and severally, firmly by these  
presents.

**WHEREAS**, said Principal has submitted a bid to the DISTRICT to perform all Work required for  
the \_\_\_\_\_ construction \_\_\_\_\_ of \_\_\_\_\_ the

\_\_\_\_\_ set forth in the Notice Inviting Bids and accompanying Bid Documents, dated \_\_\_\_\_.

NOW, THEREFORE, if said Principal is awarded a Contract for the Work by the DISTRICT and,  
within the time and in the manner required by the above- referenced Bid Documents, enters into  
the written form of Contract bound with said Bid Documents, furnishes the required bonds (one  
to guarantee faithful performance and the other to guarantee payment for labor and materials)  
furnishes the required insurance certificates and endorsements, and furnishes any other  
certifications as may be required by the Contract, then this obligation shall be null and void;  
otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by  
the DISTRICT and judgment is recovered, said Surety shall pay all costs incurred by the  
DISTRICT in such suit, including reasonable attorneys' fees to be fixed by the court.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

(SEAL)

(SEAL)

**PROPOSED SUBCONTRACTORS FORM  
(00430)**

(00430)  
**LIST OF PROPOSED SUBCONTRACTORS**

In compliance with the "Subletting and Subcontracting Fair Practices Act," Sections 4100 through 4114 of the California Public Contract Code, and any amendments thereto, each Bidder shall provide the information requested below for each subcontractor who will perform work, labor or render service to Bidder in or about the construction of the Work in an amount in excess of one-half of one percent (greater than 0.5 %) of the Bidder's Total Bid Price, or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Contractor's total bid or ten thousand dollars (\$10,000), whichever is greater, and shall further set forth the portion of the Work which will be done by each subcontractor. Bidder shall list only one subcontractor for any one portion of the Work.

If the Bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract, it shall be deemed to have agreed to perform such portion itself, and shall not be permitted to subcontract that portion of the Work except under the conditions hereinafter set forth below.

Subletting or subcontracting of any portion of the Work in excess of one half of one percent (greater than 0.5%) of the Total Bid Price or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the Contractor's total bid or ten thousand dollars (\$10,000), whichever is greater, for which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after Owner approval.

***List subcontractor name, location, license, and description, at time of bid. Within one business day after the bids are opened, each bidder must provide the address, DIR number and telephone number for each listed subcontractor unless such information is noted herein.***

[Duplicate Page if needed for listing additional subcontractors)

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_

Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_

Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_

Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_

Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_

Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_

Name and Location  
of Subcontractor

Description of Work  
to be Subcontracted

Name: \_\_\_\_\_

\_\_\_\_\_

Address: \_\_\_\_\_

License No. \_\_\_\_\_

City & Zip: \_\_\_\_\_ Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

DIR Number: \_\_\_\_\_



**NON-COLLUSION AFFIDAVIT  
(00480)**

(00480)

**NONCOLLUSION DECLARATION TO BE EXECUTED  
BY  
BIDDER AND SUBMITTED WITH BID**

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid.

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 this:

\_\_\_\_\_ day of \_\_\_\_\_

City of \_\_\_\_\_ State of \_\_\_\_\_

Signed: \_\_\_\_\_

Title: \_\_\_\_\_

**BIDDER INFORMATION FORMS  
(00490)**

**IMPORTANT NOTE:** This bid is not subject to pre-qualification. All Bidders, regardless of pre-qualification status, must complete the following Bidder Information Forms and submit them with their bid.

If you have submitted a bid to the Grossmont Union High School District within the prior three months and no changes have occurred, you may submit a copy of those Bidder Information forms with this bid.

(00490)

**INFORMATION REQUIRED OF BIDDER  
BY  
BIDDER AND SUBMITTED WITH BID**

**INFORMATION ABOUT BIDDER**

[Indicate not applicable ("N/A") where appropriate. Attach additional pages if necessary to allow for a complete response.]

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: \_\_\_\_\_

2.0 Type, if Entity: \_\_\_\_\_

3.0 Bidder Address: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Facsimile Number

\_\_\_\_\_  
Email (person resp. for contract)

4.0 How many years has Bidder's organization been in business as a Contractor? \_\_\_\_\_

5.0 How many years has Bidder's organization been in business under its present name?

\_\_\_\_\_

5.1 Under what other or former names has Bidder's organization operated?:

\_\_\_\_\_

6.0 If Bidder's organization is a corporation, answer the following:

6.1 Date of Incorporation: \_\_\_\_\_

6.2 State of Incorporation: \_\_\_\_\_

6.3 President's Name: \_\_\_\_\_

6.4 Vice-President's Name(s): \_\_\_\_\_

6.5 Secretary's Name: \_\_\_\_\_

6.6 Treasurer's Name: \_\_\_\_\_

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: \_\_\_\_\_

7.2 Name and address of all partners (state whether general or limited partnership):

\_\_\_\_\_

---

8.0 If other than a corporation or partnership, describe organization and name principals:

---

9.0 List other states in which Bidder's organization is legally qualified to do business.

---

---

10.0 What type of work does the Bidder normally perform with its own forces?

---

---

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

---

---

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

---

---

13.0 On a separate sheet, list the construction experience of the key individuals of Bidder's organization.

14.0 List Trade References:

---

---

---

---

---

---

15.0 List Bank References (Bank, Branch Address, Account Number):

---

---

16.0 Name of Bonding Company and Name and Address of Agent:

---

---

17.0 Has your contractor's license ever been revoked? Yes No

If Yes, please explain:

---

---

---

- 18.0 Has your firm or any of its owners and/or his/her firms ever been disqualified from, agreed/settled not to bid, or otherwise been prevented from bidding on, or completing public works projects? Yes No

If Yes, please explain:

---

---

---

- 19.0 Has your firm or any of its owners, officers, or partners ever been found liable in a civil suit or found guilty in a criminal action for making false claims or material representation to any public agency? Yes No

If Yes, please explain:

---

---

---

- 20.0 Has your firm ever been denied an award of a public works contract based on a finding by a public agency that your firm was not a responsible bidder? Yes No

If Yes, please explain:

---

---

---

- 21.0 Has there been any occasion in which your firm was required to pay either back wages or penalties for failure to comply with the state's prevailing wage laws? Yes No

If Yes, please explain:

---

---

---

- 22.0 Has your firm filed any stop payment notices/liens that were not resolved before a lawsuit was filed? Yes No

If Yes, please explain:

---

---

- 23.0 Has your firm had more than three stop payment notices/liens filed against it on one project that were not resolved prior to completion of the project.? Yes No

If Yes, please explain:

---

---

---

- 24.0 Has your firm (or any owner or any of its principals) ever defaulted on a contract forcing a Surety to suffer a loss? Yes No

If Yes, please explain:

---

---

---

- 25.0 Has your firm been assessed any liquidated damages in the last five years?  
Yes No

If Yes, please explain:

---

---

---

- 26.0 Has your firm failed to complete a contract within the specified time limits? Yes No

If Yes, please explain:

---

---

---

- 27.0 Has your firm or any of the owners ever declared bankruptcy? Yes No

If Yes, please explain:

---

---

---

- 28.0 Has your firm ever had insurance terminated by a carrier? Yes No

If Yes, please explain:

---

---

---

29.0 Has OSHA/CALOSHA, EPA or any other governmental agency issued any citations against your firm?      Yes                      No

If Yes, please explain:

---

---

---

30.0 Does your company safety program comply with all applicable laws?      Yes                      No

If No, please explain:

---

---

---

31.0 Is your firm presently involved in any current/pending arbitration:      Yes                      No

If Yes, please explain:

---

---

---

32.0 Is your firm involved in any current/pending litigation:                      Yes                      No

If Yes, please explain:

---

---

---

33.0 Is your firm involved in any current/pending insurance claim:                      Yes                      No

If Yes, please explain:

---

---

---

34.0 Have any complaints ever been filed against your firm with the Contractor's State License Board?                      Yes                      No

If Yes, please explain:

---



---



---

**LIST OF CURRENT PROJECTS (Backlog)**

[Duplicate Page for additional current projects.]

<u>Project</u>	<u>Description of Bidder's Work</u>	<u>Completion Date</u>	<u>Estimated Magnitude (\$ m/hrs. etc.)</u>

**LIST OF COMPLETED PROJECTS - LAST THREE YEARS**

[Duplicate Page if needed for listing additional completed projects.]

Please list any school project first which are similar enough to demonstrate Bidder's ability to perform the required Work followed by all other projects in chronological order.

<u>Project Client</u>	<u>Bidder's Work</u>	<u>Description of Performance</u>	<u>Period of Time (m/hrs.etc.)</u>	<u>Magnitude</u>

**EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE**

***Personnel:***

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

---



---



---

2. Summarize each person's specialized education:

---

---

---

3. List each person's years of construction experience relevant to the project:

---

---

---

4. Summarize such experience:

---

---

---

5. Give the name of the person responsible for onsite management of the project (e.g. Project Superintendent, Project Foreman, etc.):

---

---

6. List last three project supervised by the person named in Item 5:

---

---

---

7. List the name, address, and phone number of three references from the last three previous projects for the person named in Item. 5:

---

---

---

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the Owner.

***Additional Bidder's Statements:***

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

---

---

---

---

---

---

**VERIFICATION AND EXECUTION**

These Contract Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

By: \_\_\_\_\_  
Type or Print Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

State of California  
County of \_\_\_\_\_

Subscribed and sworn to (or affirmed) before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
by \_\_\_\_\_, proved to me on the basis of satisfactory evidence to be the  
person(s) who appeared before me.

\_\_\_\_\_  
Notary Public in and for  
the State of California

Seal

My Commission Expires: \_\_\_\_\_

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00500  
SAMPLE AGREEMENT**

## AGREEMENT FORM

**This Agreement** is made this \_\_\_\_\_ by and between the Grossmont Union High School District ("District"), a California public school district, and \_\_\_\_\_ ("Contractor"). The District and the Contractor may be referred to herein individually as a "Party" and collectively as the "Parties."

In consideration of the rights and obligations attendant to this Agreement, the Parties agree as follows:

**Section 1. Scope of Work.** The Contractor shall furnish all labor, materials, equipment, tools, and utility and transportation services, and perform and complete all work necessary for full completion of all construction and services required in accordance with the "Contract Documents" defined and specified in Section 4 of this Agreement. The Contract Documents collectively set forth the complete understandings and agreements of the Parties (the "Contract") with respect to the construction project to which this Agreement applies ("Project"). The Project may be a portion of an overall project, i.e., the Contractor may be one of multiple prime contractors for such overall project. The Project to which this Agreement applies is described as follows:

### CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571

**Section 2. Time for Completion.** The Contractor shall mobilize and commence work on the Project on the date specified in the Notice to Proceed with construction issued by the District ("Notice to Proceed"). The District may defer issuance of a Notice to Proceed as provided in the "General Conditions" forming a part of the Contract. The Contractor shall complete the Project within the period specified in the Special Conditions and in accordance with the schedule for the Project developed by the District and/or the Construction Manager for the Project. Contractor shall refer to Section 01310 (Project Construction Schedule) for individual activity durations. By entering into this Agreement, the Contractor acknowledges that such each such duration and the total construction period are sufficient and reasonable for the size and scope of the Project.

**Section 3. Contract Price.** As full consideration for the full and faithful performance of the Contract by the Contractor, the District shall pay to the Contractor the total amount stipulated in the Contractor's bid for the Project of:

\_\_\_\_\_ Dollars and \_\_\_\_\_ Cents  
(\$ \_\_\_\_\_) ("Contract Price").

The Contract Price is subject to increases and/or decreases as provided in the Contract Documents. The District shall pay the Contract Price to the Contractor in accordance with the General Conditions.

**Section 4. Component Parts of the Contract.** The Contract is composed of all of the documents specified below in this Section ("Contract Documents"), each of which is hereby incorporated as an operative and effective part of the Contract. The Parties intend that the Contract Documents are and shall be complementary and an integrated whole. Any requirement set forth in one Contract Document, but not in one or more of the others, shall be interpreted as if set forth in or applicable to all. The Contract consists of the following Contract Documents:

Notice Inviting Bids  
Information for Bidders  
Agreement  
Escrow Agreement (optional)  
Performance Bond  
Payment Bond  
Listing of Subcontractors  
Non-Collusion Affidavit  
Workers' Compensation Certificate  
Information Required of Bidder  
Acknowledgment of Project Schedule and Phasing  
Acknowledgment of Bidding Practices Regarding Indemnity  
Site Visit Certification  
Guarantee  
Workers' Compensation/Employers Liability Endorsement  
General Liability Endorsement  
Automobile Liability Endorsement  
Contractor's Certificate Regarding Drug-Free Workplace  
Contractor's Certificate Regarding Alcohol and Tobacco  
Certification of Fingerprinting Requirements  
General Conditions  
Special Conditions  
Category Scope of Work  
Specifications  
Drawings  
DVBE Documentation (if applicable)  
Addenda Nos. \_\_\_\_, \_\_\_\_, \_\_\_\_, \_\_\_\_ and \_\_\_\_, as issued.

**Section 5. Provisions Required by Law.** Each and every provision required by law to be included in the Contract is hereby deemed to be so included, and the Contract shall be construed and enforced as if all such provisions are so included. If, for any reason, any provision is not included or incorporated into the Contract Documents in accordance with law, or is not correctly included or incorporated, then, upon request of either the District or the Contractor, they shall amend the Contract Documents to include or incorporate, or to correctly include or incorporate, such provision.

**Section 6. Third Party Beneficiaries.** Except to the extent provided by law (e.g., requirements for payment of prevailing wages to workers on the Project), no party other than the Parties may claim or assert any right or benefit arising from this Agreement or the Contract of which this Agreement is a part. Each provision of the Contract Documents shall be deemed and construed to benefit only the District and/or the Contractor unless and only to the extent the provision is included in the Contract specifically as a result of any law intended to benefit that third party ("Required Provision"). Provisions included in the Contract Documents that relate to or permissibly expand on any Required Provision, but are not necessary for compliance with the law providing for the Required Provision, are to be construed as being included in the Contract for the convenience of the Parties, and shall in no event be construed as benefiting any third party or as providing a basis for any claim, demand, action or other proceeding by a third party relating to the Contract.

**Section 7. Governing Law and Venue.** The Contract of which this Agreement is a part shall be governed by the laws of the State of California. Any action, arbitration or other proceeding arising from the Contract shall be initiated and conducted only in the County of San Diego, California.

**Section 8. Entire Agreement.** The Contract as defined in Section 1 of this Agreement, and as may be amended in accordance with the Contract Documents, constitutes the entire understanding and agreement of the Parties with respect to the Scope of Work described in Section 1 of this Agreement. The Contract supersedes and replaces all other oral or written agreements, understandings, negotiations, or discussions.

**Section 9. Due Authority of Signatories.** Each person signing this Agreement on behalf of a Party represents and warrants that he or she has been duly authorized by such Party to sign, and thereby bind such Party to, this Agreement.

**In witness whereof**, each Party has executed this Agreement by and through signature of its duly-authorized representative as set forth below.

**CONTRACTOR:**

\_\_\_\_\_  
License No. \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

Date: \_\_\_\_\_

**DISTRICT:**

Grossmont Union High School District

By \_\_\_\_\_  
Scott Patterson

Title Deputy Superintendent, Business  
Services

Date \_\_\_\_\_

Governing Board Date: \_\_\_\_\_

(Corporate Seal)

Contractors are required by law to be licensed and regulated by the Contractors' State License Board. Any questions concerning a contractor may be referred to the registrar of the board whose address is:

**Contractors' State License Board**  
**9821 Business Park Drive**  
**Sacramento CA 95827**  
**(916)255-3900; <http://www2.cscb.ca.gov/>**

(Business & Professions Code, section 7030)

## WORKERS' COMPENSATION CERTIFICATE

Labor Code Section 3700 in relevant part provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

1. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.
2. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations, of ability to self-insure and to pay any compensation that may become due to employees.

I am aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provision before commencing the performance of the work of this contract.

\_\_\_\_\_  
Proper Name of Bidder

By: \_\_\_\_\_  
\_\_\_\_\_

In accordance with Article 5 (commencing at section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this contract.



## LABOR COMPLIANCE

GUHSD is now utilizing *LCPTTracker* to capture the necessary reporting required for public works projects.

Please complete the following for each project.

LCP Contact Name:

\_\_\_\_\_  
(This should be the name of the individual responsible for data entry into LCPTTracker)

LCP Contact Phone Number:

\_\_\_\_\_

LCP Contact Email:

\_\_\_\_\_  
(This is where LCPTTracker will send your user id and temporary password as well as any communication through the system such as edocuments, rejection notices, etc.)

Project Description/Contract No.:

\_\_\_\_\_

If your company is currently utilizing *LCPTTracker* with another entity, please sign in and print a screen shot of your company's information and attach. To find this information, login, go to setup tab, and company information.

If you are a new user of *LCPTTracker* we will need the following information to be provided.

Company Name:

\_\_\_\_\_

Federal Tax ID No.:

\_\_\_\_\_

Contractor's License No.:

\_\_\_\_\_

Contractor's 10-Digit Phone Number:

\_\_\_\_\_

Company Address:

\_\_\_\_\_

City, State, Zip:

\_\_\_\_\_

DIR No.:

\_\_\_\_\_

**Important Information:** Contractors and all lower-tier subcontractors and suppliers performing contract work are required to submit certified payrolls and labor compliance documentation electronically.

Electronic submittal will be a web-based system, accessed electronically on the internet at [lcptracker.com](http://lcptracker.com)

Contractor is responsible for managing and certifying all lower tier subcontractors and certified payroll submittals.

## ATTACHMENT A

Re: Labor Compliance Withholding

This letter serves as notification of withholding policies for contracts that fall under the Department of Industrial Relations (DIR) and California Labor Code §1776.

**California Labor Code §1776(h) states:** *"The contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects the contractor must comply with this section. In the event that the contractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred (\$100) for each calendar day, or portions thereof, for each worker, until strict compliance is effectuated."*

Grossmont Union High School District's policy for withholding will apply to progress payments and one-time payments to contractors that are not compliant with California Labor Code §1776. The following are the withholding amount guidelines:

- **\$2,500** will be withheld per contractor and/or subcontractor for all progress payments that do not adhere to the labor code referenced above.
- If the amount required to be withheld exceeds the amount of the invoice, the invoice will be rejected and returned to the contracted entity for resubmission once all issues are resolved.
- For all subcontractors that are listed as a sub but have not yet started work on a contract, on a monthly basis the contractor must state whether that subcontractor has performed work so the District may determine whether there are any outstanding labor code issues for the sub. The contracted entity is at risk of a withholding amount of **\$2,500**, including this amount per sub, if this communication is not received.
- For all subcontractors that have started work on a contract, but did not perform work during the progress billing submitted during the period, a nonperformance payroll must be submitted or the contracted entity is at risk of a withholding amount of **\$2,500**, including this amount per sub, if this step is not completed.
- Once a withholding is placed it may remain in place until the following review cycle, which may be up to **30 days**. Regardless of the promptness of your ability to comply the review could take a few weeks.

We thank you for your work on our projects and for your continually adherence to labor code laws. Should you have any questions, please contact Kimberly Devine at 619-644-8137.

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00600  
PERFORMANCE BOND**

(00600)  
**PERFORMANCE BOND**

WHEREAS the **GROSSMONT UNION HIGH SCHOOL DISTRICT** (also herein "Obligee") has awarded to \_\_\_\_\_ (hereinafter "Contractor"), a contract for work consisting of but not limited to, furnishing all labor, materials, tools, equipment, services, and incidentals for the construction of the **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571:**

Project and all other required structures and facilities within the rights-of-way, easements and permits;

WHEREAS, the Work to be performed by the Contractor is more particularly set forth in that certain contract for the said Public Work dated \_\_\_\_\_ (hereinafter the "Public Work Contract"); and

WHEREAS, the Contractor is required by said Public Work Contract to perform the terms thereof and to provide a bond both for the performance and guaranty thereof,

NOW,                    THEREFORE,                    we \_\_\_\_\_  
\_\_\_\_\_, the undersigned Contractor, as Principal, and  
\_\_\_\_\_, a corporation organized and existing under  
the laws of the State of \_\_\_\_\_, and duly authorized to transact business under the laws of  
the State of California, as Surety, are held and firmly bound unto the **GROSSMONT UNION HIGH SCHOOL  
DISTRICT** in the sum of \_\_\_\_\_  
dollars,  
\$ \_\_\_\_\_, said sum being not less than 100% of the total amount payable by the  
said Obligee under the terms of the said Public Work Contract, for which payment well and truly to be made,  
we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly  
by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Public Work Contract and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill the one-year guarantee of all materials and workmanship; and indemnify and save harmless the Obligee, its officers and agents, as stipulated in the said Public Work Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. In the event legal action is required to enforce the provisions of this agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to court costs, necessary disbursements, and other damages.

In case legal action is required to enforce the provisions of this bond, the prevailing party shall be entitled to recover reasonable attorneys' fees in addition to court costs, necessary disbursements and other consequential damages.

The said Surety, for value received, hereby stipulates and agrees that no change, extensions of time, alteration or addition to the terms of the Public Work Contract or to the Work to be performed thereunder, or the specifications accompanying the same shall in any way affect its obligations on 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 to the Work or to Specifications.

IN WITNESS WHEREOF, we have hereto set our hands and seals this \_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_.

\_\_\_\_\_

\_\_\_\_\_  
Principal/Contractor

By:

\_\_\_\_\_  
President

\_\_\_\_\_  
Surety

By:

\_\_\_\_\_  
Attorney-in-Fact

The rate of premium on this bond is \_\_\_\_\_ per thousand.

The total amount of premium charged, \$\_\_\_\_\_.

(The above must be filled in by corporate surety.)

STATE OF CALIFORNIA        )  
  )       ss.  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me,  
\_\_\_\_\_, a Notary Public in and for said state, personally appeared  
\_\_\_\_\_, known to me (or proved to be on the basis of satisfactory  
evidence) to be the person whose name is subscribed to the within instrument as the Attorney-in-Fact of the  
\_\_\_\_\_ (surety) and acknowledged to me that he subscribed the name of  
the \_\_\_\_\_ (surety) thereto and his own name as Attorney-in-Fact.

\_\_\_\_\_  
Notary Public in and for said State

(SEAL)

My Commission expires \_\_\_\_\_.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, \_\_\_\_\_, certify that I am the  
\_\_\_\_\_ Secretary of the corporation named as principal to the  
within bond; that \_\_\_\_\_ who signed the said bond on behalf of  
the principal was then \_\_\_\_\_ of said corporation; that I know his  
signature, and his signature thereto is genuine; and that said bond was duly signed, sealed and attested for  
and in behalf of said corporation by authority of its governing Board.

(Corporate Seal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

NOTE: A copy of the power of attorney to local representatives of the bonding company may be attached hereto.

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00610  
PAYMENT BOND**

**PAYMENT BOND  
(CALIFORNIA PUBLIC WORK)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the **Grossmont Union High School District** (hereinafter referred to as "Public Entity"), by action taken or a resolution passed \_\_\_\_\_, 20\_\_\_\_, has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal") a contract for the work described as follows: \_\_\_\_\_ (the "Project"); and

WHEREAS, said Principal is required by Chapter 5 (commencing with Section 9550), of Title 3, Part 6, Division 4 of the California Civil Code to furnish a bond in connection with said contract;

NOW THEREFORE, we, the Principal and \_\_\_\_\_, as Surety, are held and firmly bound unto the Public Entity 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 bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay (1) any of the persons named in Section 9100 of the California Civil Code, (2) amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or (3) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the contractor and its subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then the Surety will pay for the same, in an amount not exceeding the sum hereinabove specified, and also, in case suit is brought upon this bond, will pay such reasonable attorneys' fees as shall be fixed by the court as provided in California Civil Code sections 9550 et seq.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the California Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement hereinabove described; nor by a change or modification to the terms of payment or an extension of time for payment pertaining to or relating to any scheme or work of improvement hereinabove described; nor by any rescission or attempted rescission of the contract, agreement, or bond; nor by any conditions precedent or subsequent in the bond purporting to limit the right of recovery of a claimant otherwise entitled to recover pursuant to the contract, agreement, or bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or Public Entity and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that the claimant is a person described in Article 1 (commencing with Section 8400) of Chapter 4 of Title 2, or in Section 9100, of the California Civil Code, and has not been paid the full amount of his claim; and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

Principal \_\_\_\_\_

By \_\_\_\_\_

[Attach required acknowledgments]

Surety \_\_\_\_\_

By Attorney-in- Fact



Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code section 105, and if the work or Project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

(Name and Address of Surety)	(Name and Address of agent or representative for service for service of process in California)
_____ _____  Telephone: _____	_____ _____  Telephone: _____

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year \_\_\_\_\_, before me, \_\_\_\_\_, a Notary Public in and for said State, personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed within the instrument as the Attorney-in-Fact of the \_\_\_\_\_ (Surety) and acknowledged to me that he subscribed the name of the \_\_\_\_\_ (Surety) thereto and his own name as Attorney-in-Fact.

<div>_____ Notary Public in and for said State</div> <div>Commission expires: _____</div>	<div>(SEAL)</div>
---	-------------------

00138.00005/394049.2

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00700  
GENERAL CONDITIONS**

## TABLE OF CONTENTS

Section 1.1	ORGANIZATION.....	1
Section 1.2	DEFINITIONS .....	1
Section 1.3	CONTRACT DOCUMENTS .....	4
Section 1.4	OWNERSHIP AND USE OF CONTRACT DOCUMENTS .....	8
Section 2.1	INFORMATION AND SERVICES REQUIRED OF THE DISTRICT .....	8
Section 2.2	DISTRICT'S RIGHT TO CARRY OUT THE WORK .....	12
Section 3.1	SUPERVISION AND CONSTRUCTION PROCEDURES.....	13
Section 3.2	SUPERINTENDENT .....	14
Section 3.3	LABOR AND MATERIALS .....	15
Section 3.4	WARRANTY .....	18
Section 3.5	TAXES.....	19
Section 3.6	PERMITS, FEES AND NOTICES .....	19
Section 3.7	LABOR COMPLIANCE PROGRAM.....	19
Section 3.8	ABATEMENT SPECIFICATIONS .....	20
Section 3.9	DOCUMENTS AND SAMPLES AT THE PROJECT SITE.....	20
Section 3.10	SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES .....	20
Section 3.11	INTEGRATION OF WORK .....	27
Section 3.12	CLEANING UP .....	28
Section 3.13	ACCESS TO WORK.....	28
Section 3.14	ROYALTIES AND PATENTS .....	28
Section 3.15	INDEMNIFICATION.....	28
Section 3.16	RULES OF CONDUCT .....	30
Section 4.1	ADMINISTRATORS.....	32
Section 4.2	ADMINISTRATION OF THE CONTRACT.....	34
Section 4.3	PROJECT INSPECTOR .....	36
Section 4.4	ADDITIONAL CHARGES FOR PROFESSIONAL SERVICES .....	37
Section 4.5	CLAIMS AND LEGAL PROCEEDINGS .....	38
Section 5.1	DEFINITIONS .....	43
Section 6.1	DISTRICT RIGHT TO PERFORM CONSTRUCTION .....	44
Section 6.2	PRESERVATION OF PROJECT SITE AND MATERIAL.....	46
Section 6.3	DISTRICT'S RIGHT TO CLEAN UP .....	46
Section 7.1	CHANGES .....	46
Section 7.2	CHANGE ORDERS .....	47
Section 7.3	CONSTRUCTION CHANGE DIRECTIVES.....	47
Section 7.4	REQUEST FOR INTERPRETATION .....	48
Section 7.5	REQUEST FOR PROPOSAL.....	48
Section 7.6	CHANGE ORDER REQUEST.....	49
Section 7.7	COST OF CHANGE ORDERS.....	49
Section 8.1	DEFINITIONS .....	52
Section 8.2	HOURS OF WORK.....	53
Section 8.3	PROGRESS AND COMPLETION.....	54
Section 8.4	DELAYS .....	54
Section 9.1	CONTRACT PRICE .....	58
Section 9.2	COST BREAKDOWN .....	58
Section 9.3	PROGRESS PAYMENTS .....	58
Section 9.4	APPLICATIONS FOR PROGRESS PAYMENTS.....	60
Section 9.5	WARRANTY OF TITLE.....	63
Section 9.6	DECISIONS TO WITHHOLD PAYMENT .....	64
Section 9.7	NON-CONFORMING WORK.....	65

Section 9.8	SUBCONTRACTOR PAYMENTS .....	66
Section 9.9	CLOSE-OUT REQUIREMENTS .....	66
Section 9.10	PARTIAL OCCUPANCY OR USE.....	70
Section 9.11	COMPLETION AND FINAL PAYMENT .....	70
Section 9.12	SUBSTITUTION OF SECURITIES .....	72
Section 10.1	SAFETY PRECAUTIONS AND PROGRAMS .....	72
Section 10.2	SAFETY OF PERSONS AND PROPERTY .....	74
Section 10.3	EMERGENCIES .....	77
Section 10.4	HAZARDOUS MATERIALS .....	78
Section 11.1	PRIME CONTRACTOR'S LIABILITY INSURANCE .....	78
Section 11.2	WORKERS' COMPENSATION INSURANCE .....	80
Section 11.3	BUILDER'S RISK - "ALL RISK" INSURANCE .....	80
Section 11.4	FIRE INSURANCE.....	80
Section 11.5	OTHER INSURANCE .....	80
Section 11.6	PROOF OF INSURANCE .....	81
Section 11.7	COMPLIANCE .....	81
Section 11.8	WAIVER OF SUBROGATION.....	81
Section 11.9	PERFORMANCE AND PAYMENT BONDS .....	82
Section 12.1	UNCOVERING OF WORK.....	82
Section 12.2	CORRECTION OF WORK.....	83
Section 13.1	GOVERNING LAW .....	83
Section 13.2	SUCCESSORS AND ASSIGNS.....	84
Section 13.3	WRITTEN NOTICE .....	84
Section 13.4	RIGHTS AND REMEDIES .....	84
Section 13.5	TESTS AND INSPECTIONS.....	84
Section 13.6	TRENCHES AND OTHER EXCAVATIONS .....	85
Section 13.7	WAGE RATES, TRAVEL, AND SUBSISTENCE .....	87
Section 13.8	RECORD OF WAGES PAID: INSPECTION .....	88
Section 13.9	APPRENTICES .....	89
Section 13.10	ASSIGNMENT OF ANTI-TRUST CLAIMS .....	90
Section 13.11	STATE AUDIT .....	91
Section 13.12	STORM WATER RUN-OFF .....	91
Section 14.1	TERMINATION BY THE PRIME CONTRACTOR FOR CAUSE .....	93
Section 14.2	TERMINATION BY THE DISTRICT FOR CAUSE.....	93
Section 14.3	TERMINATION FOR CONVENIENCE OF DISTRICT .....	94
Section 14.4	REMEDIES OTHER THAN TERMINATION.....	95

GENERAL CONDITIONS

Section 1.1 ORGANIZATION

**1.1.1 Subdivisions.** The provisions of these General Conditions are organized based on a numbering system in which:

- (i) Parts (e.g., Part 3) may be subdivided into Sections (e.g., Section 3.1);
- (ii) Sections may be subdivided into Subsections (e.g., Subsection 3.1.1); and
- (iii) Subsections may be subdivided into Articles (e.g., Article 3.1.1.1).

**1.1.2 Captions and Headings.** Captions or headings for the Parts, Sections, Subsections and Articles of these General Conditions are provided for convenience of the reader and shall not be construed to define or limit such provisions.

**1.1.3 Lists.** Lists (i.e., enumerations of items) are set forth using Romanette symbols (i.e., i, ii, iii, iv, *et cetera*), and lists within lists are set forth using lower-case alpha characters (i.e., a, b, c, *et cetera*).

Section 1.2 DEFINITIONS

Capitalized terms and phrases are used in these General Terms for the convenience of the reader. Capitalized terms and phrases may be defined in the subsequent provisions of these General Terms or in other Contract Documents or, if not so defined, shall have the meanings ascribed to them as follows:

- (i) Action of the Governing Board is a vote of a majority of the Governing Board of the District ("Governing Board").
- (ii) Approval means written authorization through action of the Governing Board. In addition, the Governing Board has delegated to the Deputy Superintendent of Business Services the authority to approve certain modifications and Construction Change Directives where the aggregate sums of the modifications or Construction Change Directives do not exceed \$100,000 or 10% of the Contract Price, whichever is less. In no event shall the Deputy Superintendent of Business Services have authority to approve total Construction Change Directives or modifications to the Project exceeding 10% of the Contract Price without Governing Board approval.
- (iii) Architect means the architect, engineer, or other design professional under contract to the District for designing and performing general observation of the

construction and interpretation of the Drawings and Specifications for the Project, and the Architect is identified in the Special Conditions.

- (iv) As shown, as indicated, and as detailed refer to Drawings referenced in the Specification.
- (v) Construction Manager for the Project is the professional management consultant under contract to the District for management of the Project and assistance with administration of the Contract, and the Construction Manager is identified in the Special Conditions.
- (vi) Contract when used in these General Conditions shall be a reference to the Contract Documents as defined herein.
- (vii) Contract Documents consist of all documents that establish the entire understanding and agreement between the District and the Prime Contractor, and are identified in the Agreement. The Contract Documents are identified in the Agreement and include Modifications issued after execution of the Agreement. A Modification is a written amendment to the Contract signed by both parties, a Change Order, a Construction Change Directive, or a written order for a minor change in the Work issued by the Architect or Construction Manager. The Contract Documents collectively form the Contract. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect or Construction Manager and Prime Contractor, between the District and any Subcontractor or sub-subcontractor, or between any persons or entities other than the District and the Prime Contractor.
- (viii) Prime Contractor is identified as such in the Agreement. The terms Contractor and Prime Contractor have the same meaning and are used interchangeably in the Contract Documents.
- (ix) Days means calendar days unless otherwise indicated.
- (x) Project Inspector or Inspector of Record is the individual retained by the District in accordance with Title 21 and Title 24 of the California Code of Regulations and who will be assigned to the Project.
- (xi) Drawings are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

- (xii) Emergency is a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.
- (xiii) Locality in which the Work is performed means San Diego County.
- (xiv) Project is all construction and other work and services to be performed in accordance with the Contract Documents.
- (xv) Project Manual is the volume assembled for the Work which may include, among others, the Notice Inviting Bids, Instructions for Bidders, sample forms, General Conditions, Special Conditions, and Specifications.
- (xvi) Provide shall include "provide complete in place," that is "furnish and install."
- (xvii) Safety Orders are those issued by any city, county, State of California or federal agency with competent and corresponding jurisdiction.
- (xviii) Project Site means the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work. "On-site" means the area bounded by the Project Site's legal description and "off site" means the area outside the Project Site's legal description.
- (xix) Specifications are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.
- (xx) Standards, rules, and regulations referred to are recognized printed standards and shall be considered as one and a part of the Contract Documents within limits therein specified. Applicable federal, State of California and local regulations are incorporated into the Contract Documents by reference.
- (xxi) Subcontractor means those having direct or indirect contracts with Prime Contractor and those who furnish labor, material or services for a special design according to Drawings and Specifications for the Work, but does not include those who merely furnish material not so worked.
- (xxii) Surety is the person, firm, or corporation that executes as surety the Prime Contractor's Performance Bond and Payment Bond and must be admitted and authorized to conduct business in the State of California.

- (xxiii) Work means all labor, materials and equipment necessary for the Prime Contractor and its Subcontractors to fulfill all of the Prime Contractor's obligations pursuant to the Contract Documents, whether using its own forces or Subcontractors. Work includes the obligation of the Prime Contractor and each Subcontractor to visit the Project Site (a continuing obligation after commencing the Work), to fully acquaint and familiarize itself with existing conditions and the character of the operations to be carried out under the Contract Documents, and make such investigation as it may see fit so that it fully understands the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Work includes the obligation of the Prime Contractor and each Subcontractor to thoroughly examine and become familiar with the Drawings, Specifications, Summary Scope of Work, and associated bid documents.
- (xxiv) Worker includes any laborer, mechanic or other worker.

### Section 1.3 CONTRACT DOCUMENTS

#### 1.3.1 **Correlation and Intent.**

**1.3.1.1** *Complementary and Inclusive.* The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. All Contract Documents establish the Contract. Any item of Work shown or mentioned in one Contract Document, but not in others (including, without limitation, if an item is mentioned in the Specifications, but not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications) shall be provided by Prime Contractor as if shown or mentioned in both.

**1.3.1.2** *Coverage of the Drawings and Specifications.* The Drawings and Specifications generally describe the Work to be performed by Prime Contractor. Generally, the Specifications describe Work which cannot be readily indicated on the Drawings and indicate types, qualities, and methods of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications even if they are of such nature that they could have been shown. All materials or labor for Work are shown on either the Drawings or the Specifications (or reasonably inferable therefrom as being necessary to complete the Work) shall be provided by the Prime Contractor to provide a complete Project. It is intended that the Work be of sound, quality construction, and the Prime Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by them.

**1.3.1.3** *Conflicts.* In the event there is a discrepancy in or inconsistency between the various Contract Documents, it is intended that the more stringent, higher quality, and greater quantity of Work shall apply.



**1.3.1.4**        *Conformance with Laws.* Each and every provision of law required by law to be inserted in the Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted.

Before commencing any portion of the Work, Prime Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include Title 21 and Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading and all other applicable agencies. In the event Prime Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with the Contract Documents, Prime Contractor shall, within five (5) days, notify Architect, Construction Manager and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project.

The Prime Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if the Prime Contractor performed same (1) without first consulting the Architect or Construction Manager for further instructions regarding said Work or (2) disregarded the Architect or Construction Manager's instructions regarding said Work.

**1.3.1.5**        *Ambiguity and Inconsistency.* Before commencing any portion of the Work, Prime Contractor shall carefully examine all Drawings and Specifications and other information given to Prime Contractor as to materials and methods of construction and other Project requirements. Prime Contractor shall, within five (5) days, notify Architect, Construction Manager and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Prime Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Prime Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. If Prime Contractor performs, permits, or causes the performance of any Work under the Contract Documents prepared by or on behalf of Prime Contractor that is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Prime Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction, without increase to or adjustment in the Contract Price or the time for performance.

### **1.3.2    Addenda and Deferred Approvals.**

**1.3.2.1**        *Addenda* are the changes in Drawings, Specifications and other Contract Documents that have been authorized in writing by the District, Architect or

Construction Manager, and which alter, explain, or clarify the Contract Documents. Addenda shall govern over all other Contract Documents. Subsequent addenda issued shall govern over prior addenda unless otherwise specified in the addenda.

**1.3.2.2**        *Deferred Approvals.* Contract Documents which require deferred approval items are meant to be for illustration purposes only. Prime Contractor is responsible for all deferred approval requirements set forth in the Contract Documents. Prime Contractor is responsible to comply with all laws, building codes, and regulations necessary to obtain all necessary approvals, including those required from the Division of the State Architect ("DSA") and the State Fire Marshall. Prime Contractor shall not be granted an extension of time for failure to obtain necessary approvals due to failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Prime Contractor shall schedule all deferred approval items in its progress schedule pursuant to Part 3. If Prime Contractor fails to include deferred-approval items in its schedule which results in a critical path delay, then Prime Contractor shall be subject to the assessment of liquidated damages.

### **1.3.3 Specification Interpretation.**

**1.3.3.1**        *Titles.* The Specifications are separated into titled Sections for convenience only and not to dictate or determine the trade or craft involved.

**1.3.3.2**        *As Shown, Et Cetera.* Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Architect is intended unless otherwise stated.

**1.3.3.3**        *General Conditions.* The General Conditions are a part of each and every Section of the Specifications.

**1.3.3.4**        *Abbreviations.* In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Prime Contractor shall," "shall be," *et cetera*, are intentional. Nevertheless, the requirements of the Specifications are mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

**1.3.3.5**        *Plural.* Words in the singular shall include the plural whenever applicable or the context so indicates.

**1.3.3.6**        *Metric.* The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the

U.S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E 380, "Standard for Metric Practice."

**1.3.3.7**      *Standard Specifications.* Any reference to standard specifications of any society, institute, association, or governmental authority is a reference to the organization's standard specifications, which are in effect at the date of the Prime Contractor's proposal unless directed otherwise. If applicable specifications are amended prior to completion of any part of the Work, the Prime Contractor may, if acceptable to Architect or Construction Manager, perform such Work in accordance with the amended specifications. The standard specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Architect will furnish, upon request, information as to how copies of the standard specifications referred to may be obtained.

#### **1.3.4 Rules of Document Interpretation.**

**1.3.4.1**      In the event of conflict within the Drawings, the following rules shall apply:

- (i)      General Notes, when identified as such, shall be incorporated into other portions of Drawings.
- (ii)      Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.
- (iii)      Larger scale Drawings shall take precedence over smaller scale Drawings.
- (iv)      At no time shall the Prime Contractor base construction on scaled Drawings.

**1.3.4.2**      Specifications shall govern as to materials, workmanship, and installation procedures.

**1.3.4.3**      If Prime Contractor observes that Drawings and Specifications are in conflict, Prime Contractor shall, within five (5) days, notify the Architect or Construction Manager in writing for the purposes of obtaining an interpretation of the Contract Documents.

**1.3.4.4**      In the case of conflict or inconsistencies, the order of precedence shall be as follows:

- (i)      General Conditions govern over Drawings and Specifications.
- (ii)      Special Conditions govern over General Conditions.
- (iii)      The Agreement shall govern over the Special Conditions.

- (iv) In the case of disagreement or conflict between or within standards, Specifications, and Drawings, the more stringent, higher quality, and greater quantity of Work shall apply.

#### Section 1.4 OWNERSHIP AND USE OF CONTRACT DOCUMENTS

The Drawings, Specifications, and other Contract Documents for the Project are the property of the District and/or Architect pursuant to Education Code Section 17316. The Prime Contractor may retain one Contract record set. Neither the Prime Contractor nor any Subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect. All copies except the Prime Contractor's record set shall be returned or properly accounted for upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to the Prime Contractor are not to be used by the Prime Contractor or any Subcontractor, sub-subcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work. The District and/or Architect hereby grant to the Prime Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings, Specifications, and other documents prepared for the Project in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the District's property interest or other reserved right.

### **PART 2 DISTRICT**

#### Section 2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT

**2.1.1 Project Site Survey.** If necessary for the Work, the District will furnish upon request and at its expense a legal description of the Project Site and a land survey showing the boundaries of the Project Site. Prime Contractor shall be responsible for all surveys regarding location of construction, grading and site work. The Prime Contractor is responsible to perform underground utility locating, through the use of a locating service and potholing for existing utilities. The Prime Contractor shall produce a report of utilities located prior to beginning any excavations.

**2.1.2 Geotechnical Services and Soils Report.** When required by the scope of the Project, the District will furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required and deemed necessary by the Architect or as required by local or State of California codes. Such services, with written reports and appropriate written professional recommendations, may include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary operations for determining subsoil, air, and water conditions.

The Soils Report recommendations may be less restrictive than the Specifications. The Prime Contractor shall construct the earthwork and soil related portion of the Project as indicated in the Specifications. The Soils Report is supplementary to the Specifications and is for information purposes only and shall not be considered a part of the Contract Documents.

If a soils investigation report has been obtained from test holes at the Project Site, such report is available AS INFORMATION ONLY for the Prime Contractor's use in preparing its bid and Work under the Contract. The soils report is available at the Construction Manager's office for review. Any information obtained from such report or any other information given on Drawings as to subsurface soils conditions or to elevations of existing grades or elevations of underlying rock is approximate only.

THE DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE. ANY SOILS INVESTIGATION REPORT IS PROVIDED FOR PRIME CONTRACTOR'S INFORMATION ONLY. PRIME CONTRACTOR SHALL BE DEEMED TO HAVE CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE EXISTING SOILS CONDITIONS. THE DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE PROJECT SITE, AND PRIME CONTRACTOR IS FULLY RESPONSIBLE FOR ASCERTAINING EXISTING CONDITIONS FOR PURPOSES OF DETERMINING CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING CONSTRUCTION. THE SOILS INVESTIGATION REPORT IS NOT A CONTRACT DOCUMENT.

### **2.1.3 Utilities.**

**2.1.3.1** *Regional Notification Center.* Prime Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) business days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and carried out by the Prime Contractor unless such an inquiry identification number has been assigned to the Prime Contractor or any Subcontractor and the District has been given the identification number by the Prime Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Prime Contractor. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Prime Contractor and shall not be considered for extension of time pursuant to Section 8.4.

**2.1.3.2** *Utilities - Removal and Restoration.* The District has endeavored to determine the existence of utilities at the Project Site from the records of the District of known utilities in the vicinity of the Work. The positions of these utilities as derived from such records are shown in the Contract Documents.

No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities may not be shown on the Drawings. It shall be the responsibility of the Prime Contractor to determine the exact location of all service connections. The Prime Contractor shall make its own investigations, including exploratory excavations, to determine the

locations and type of service connections, prior to commencing the Work which could result in damage to such utilities. The Prime Contractor shall immediately notify the District's representative as to any utility discovered by Prime Contractor in a different position than shown in the Contract Documents or which is not shown on the Contract Documents.

Prime Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas and telephone and meet with said utilities prior to the start of any Work.

**2.1.3.3**        *Other Utilities.* In case it should be necessary to remove, relocate, or temporarily maintain a utility because of interference with the Work, the work on the utility shall be performed and paid for as follows:

When it is necessary to remove, relocate or temporarily maintain a service connection, the cost of which is not required to be borne by the owner thereof, the Prime Contractor shall bear all expenses incidental to the work on the service connection. The work on the service connection shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the service connection has the option of doing such work with its own forces or permitting the work to be done by the Prime Contractor.

When it is necessary to remove, relocate, or temporarily maintain a utility which is in the position shown on the Drawings, the cost of which is not required to be borne by the owner thereof, the Prime Contractor shall bear all expenses incidental to the work on the utility. The work on the utility shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the utility has the option of doing such work with its own forces or permitting the work to be done by the Prime Contractor.

When it is necessary to remove, relocate, or temporarily maintain a utility which is not shown on the Drawings or is in a position materially different from that shown on the Drawings and were it in the position shown on the Drawings would not need to be removed, relocated, or temporarily maintained, and the cost of which is not required to be borne by the owner thereof, the District will make arrangements with the owner of the utility for such work to be done at no cost to the Prime Contractor, or will require the Prime Contractor to do such work in accordance with Part 7 or will make changes in the alignment and grade of the Work to obviate the necessity to remove, relocate, or temporarily maintain the utility. Changes in alignment and grade will be ordered in accordance with Part 7 herein.

No representations are made that the obligations to move or temporarily maintain any utility and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it shall be the responsibility of the Prime Contractor to investigate to find out whether said cost is required to be borne by the owner of the utility.

The right is reserved to governmental agencies and to owners of utilities to enter at any time upon any street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the Work and for the purpose of maintaining and making repairs to their property.

## **2.1.4 Existing Utility Lines; Removal, Relocation.**

**2.1.4.1**      *Main or Trunkline Facilities.* If the Prime Contractor while performing the Contract discovers utility facilities not identified by the District in the Contract Documents, Prime Contractor shall, within one (1) day, notify the District and utility in writing.

The District has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the Drawings and Specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the Drawings and Specifications and made a part of the Invitation to Bid, District shall assume the responsibility for their timely removal, relocation, or protection.

The owner of the public utility shall have the sole discretion to perform repairs or relocation work or permit the Prime Contractor to do such repairs or relocation work at a reasonable price.

The Prime Contractor shall exercise reasonable care and shall be compensated by the District for the actual verified field costs of locating and removing, relocating, protecting or temporarily maintaining such main or trunkline utility facilities not indicated with reasonable accuracy in the Drawings and Specifications, and for equipment in use on the Project necessarily idled during such work. This work shall be performed in accordance with Part 7 of these General Conditions.

Alternatively, District may make changes in the alignment and grade of the Work to obviate the need to remove, relocate, or temporarily maintain the utility, in accordance with Part 7 or District may make arrangements with the owner of the utility for such work to be done at no cost to the Prime Contractor.

The Prime Contractor shall not be assessed a forfeiture for delay in completion of the Project when such delay is caused by the failure of the District or the owner of the utility to provide for the removal, relocation, protection or temporary maintenance of all such main or trunkline facilities not indicated with reasonable accuracy.

Nothing herein shall preclude the District from pursuing any appropriate remedy against the utility for delays which are the responsibility of the utility.

Nothing herein shall be construed to relieve the utility from any obligation as required either by law or by contract to pay the cost of removal or relocation of existing utility facilities.

**2.1.4.2**      *Assessment.* This Subsection 2.1.4 shall not be construed to preclude assessment against the Prime Contractor for any other delays in completion of the Work. Nothing in this Subsection 2.1.4 shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Project Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Project Site.

**2.1.4.3 Notification.** If the Prime Contractor, while performing Work under the Contract, discovers utility facilities not identified by the District in the Contract Documents, the Prime Contractor shall, within one (1) day, notify the District and the utility in writing.

**2.1.5 Easements.** District shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract Documents.

## Section 2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK

**2.2.1 Prime Contractor Default.** If the Prime Contractor fails to perform the Work in accordance with the Contract Documents, the Prime Contractor shall be deemed to have defaulted or neglected to carry out the Work, including, but not limited to, circumstances in which the Prime Contractor:

- (i) Fails to supply adequate workers on the Project or any part thereof;
- (ii) Fails to supply a sufficient quantity of materials or to order materials in a timely manner;
- (iii) Fails to prepare and/or submit deferred-approval items or shop drawings in a timely manner;
- (iv) Fails to perform any provision of the Contract;
- (v) Fails to comply with safety requirements or creates an unsafe condition;
- (vi) Fails to comply with the critical path of any applicable Construction Schedule; or
- (vii) Fails to comply with the Subletting and Subcontracting Fair Practices Act, Public Contract Code Sections 4100 *et seq*; or
- (viii) In the case of bona fide emergency; or
- (ix) Failure to order materials in a timely manner.

**2.2.2 District Remedies.** If the Prime Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails (within a forty-eight (48) hour period after receipt of written notice or a shorter time period expressly stated in the written notice from the District in an emergency situation) to promptly commence and diligently continue correction of such default or neglect, the District may correct the deficiencies without prejudice to other remedies the District may have, including, without limitation, those set forth in Part 14, after providing forty-eight (48) hour written notice to Prime Contractor and Surety. If, during this forty-eight (48) hour period, Surety personally serves notice on the District that the Surety intends to perform such Work, District shall allow Surety seven (7) days to perform. In such case, the Prime Contractor will be invoiced the cost of correcting the deficiencies, including



compensation for additional services and expenses made necessary by such default or neglect. The invoice amount shall be deducted from the next payment due the Prime Contractor. If payments then or thereafter due the Prime Contractor are not sufficient to cover such amounts, the Prime Contractor shall pay the difference to the District.

### **PART 3 THE PRIME CONTRACTOR**

#### **Section 3.1    SUPERVISION AND CONSTRUCTION PROCEDURES**

**3.1.1 Prime Contractor.** The Prime Contractor shall continually supervise and direct the Work using the Prime Contractor's best skill and attention. The Prime Contractor shall be solely responsible for and have control over construction means, methods, techniques, and procedures; and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. The Prime Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved shop drawings, product data, or samples for any such portion of the Work. If any work is to be performed by contractors retained directly by the District, Prime Contractor shall be responsible for the coordination and sequencing of the work of those other contractors so as to avoid any impact on the Project schedule determined in accordance with Part 8. Specific duties of the Prime Contractor shall include those set out in Section 43 of Title 21 of the California Code of Regulations and Section 4-343 of Title 24 of the California Code of Regulations. These duties include, but are not limited to the following:

- (i) The Prime Contractor shall carefully study the Drawings, Specifications and other Contract Documents, and shall plan and schedule its operations well ahead of time. The Prime Contractor shall promptly report to the District any and all inconsistencies or time periods that appear to be in error in the Contract Documents. In no event shall any instruction by the District be construed to cause Work to be performed that does not conform with applicable law and the Contract Documents.
- (ii) The Prime Contractor shall carefully inspect the Project Site and shall plan and schedule its operations well ahead of time. The Prime Contractor must promptly report to the Construction Manager any local conditions that may adversely affect the Work. In no event shall any instruction by the Construction Manager or Architect be construed to cause Work to be performed that does not conform with applicable law and the Contract Documents.
- (iii) The Prime Contractor shall complete the Work in accordance with the approved Drawings and Specifications. If at any time it is discovered that Work is being done which is not in accordance with the approved Drawings and Specifications, the Prime Contractor shall correct the Work immediately. The Prime Contractor in no way is relieved of any responsibility by the activities of the District, Construction Manager, Architect, Project Inspector or DSA in the performance of their duties.

- (iv) The Prime Contractor shall not carry on Work except with the knowledge of the Project Inspector. Prime Contractor shall provide the Inspector of Record with a written punch-list prior to requesting that the Architect perform the final inspection.
- (v) The Prime Contractor shall make and submit to the office from time to time, verified reports as required in Section 36 of Title 21 and Section 4-366 of Title 24.
- (vi) The Prime Contractor shall fully comply with any and all reporting requirements of Education Code Sections 17315 et seq., in the manner prescribed by Title 24.
- (vii) The Prime Contractor shall perform quality control within its own forces and its Subcontractor forces.
- (viii) The Prime Contractor shall provide daily reports listing its and its Subcontractors' personnel, including and but not limited to trades, experience levels and any equipment or materials arriving on-site or installed on that date. The Prime Contractor shall attach the minutes and any sign-in or attendance sheet for any safety meetings conducted by the Prime Contractor to the daily report for that date.

**3.1.2 Prime Contractor Responsibility.** The Prime Contractor shall be responsible to the District for acts and omissions of the Prime Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Prime Contractor or any of its Subcontractors.

**3.1.3 Obligations not Changed by Architect's Actions.** The Prime Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Construction Manager or Architect in the administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Prime Contractor.

**3.14. Acceptance/Approval of Work.** The Prime Contractor shall be responsible to determine when any completed portions of the Work already performed under the Contract or provided pursuant to Part 6 are suitable to receive subsequent Work thereon.

## Section 3.2 SUPERINTENDENT

**3.2.1 Full Time Superintendent.** Unless personally present on the Project Site where the Work is being performed, the Prime Contractor shall keep on the Work at all times during its progress a competent construction Superintendent satisfactory to the District. The Superintendent shall be present on a full-time basis, shall be dedicated exclusively to the Project and shall not share superintendence duties with another project or job. The Superintendent shall not be replaced except with written consent of the District. The

Superintendent shall represent the Prime Contractor in its absence and shall be fully authorized to receive and fulfill any instruction from the Construction Manager, the Architect, the Project Inspector, the District or any other District representative. The Superintendent shall originate all Requests for Information and responses thereto shall be given to the Superintendent. No Work shall begin on any day by any Subcontractor or other person on the Project Site until the Superintendent has arrived, and no Work shall continue during the day after the Superintendent has departed from the Project Site. The Superintendent shall have authority to bind Prime Contractor through the Superintendent's acts. The Superintendent shall represent the Prime Contractor, and communications given to the Superintendent shall be binding on the Prime Contractor. Before commencing the Work, Prime Contractor shall give written notice to District, Construction Manager and Architect of the name and a Statement of Qualifications of such superintendent. If a superintendent proves to be unsatisfactory to Prime Contractor and ceases to be in its employ, Prime Contractor shall notify District, Construction Manager and Architect in writing. Such notice shall designate and seek approval of a replacement Superintendent. Prime Contractor shall provide a replacement superintendent approved by the District prior to performing additional Work.

**3.2.2 Staff.** Notwithstanding other requirements of the Contract Documents, the Prime Contractor and each Subcontractor shall: (1) furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; (2) organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and (3) keep an adequate force of skilled and fit workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

**3.2.3 Right to Remove.** District shall have the reasonable right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Prime Contractor, Subcontractor, material or equipment supplier.

### Section 3.3 LABOR AND MATERIALS

**3.3.1 Prime Contractor to Provide.** Unless otherwise provided in the Contract Documents, the Prime Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, air conditioning, utilities, transportation, and other facilities, services and permits necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

**3.3.2 Quality.** Unless otherwise specified, all materials and equipment to be permanently installed in the Project shall be new and shall be of the highest quality or as specifically stated in the Contract Documents. The Prime Contractor shall, if requested, furnish satisfactory evidence as to kind and quality of all materials and equipment within ten (10) days of a written request by the District, including furnishing the District with bona fide copies of invoices for materials or services provided on the Project. All labor shall be performed by workers skilled in their respective trades, and shall be of the same or higher quality as with the

standards of other school construction. The Prime Contractor shall maintain an effective quality control mechanism such that rework or replacement of defective Work is kept at a minimum.

**3.3.3 Replacement.** Any work, materials, or equipment that does not conform with the requirements or standards set forth in the Contract Documents may be disapproved by the District, in which case, they shall be removed and replaced by the Prime Contractor at no additional cost or extension of time to the District.

**3.3.4 Discipline.** The Prime Contractor shall enforce strict discipline and good order among the Prime Contractor's and Subcontractors' employees, and other persons carrying out the Contract. The Prime Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. As used in this Subsection, "unfit" includes any person who the District concludes is improperly skilled for the task assigned to that person, who fails to comply with the requirements of this Subsection or other applicable standards of behavior, or who creates safety hazards which jeopardize other persons and/or property.

**3.3.5 Employee Background Checks.** If this provision is made applicable as set forth in the Special Conditions, the Prime Contractor shall comply with all provisions of Education Code Section 45125.1. Pursuant to Education Code Section 45125.1, Prime Contractor shall conduct criminal background checks of all employees of Prime Contractor and its Subcontractors assigned to the Project Site, and, using the form included in the Contract Documents or provided by the District, shall certify that no such employees who have been convicted of serious or violent felonies (as specified in Education Code Section 45125.1) will have contact with pupils. As part of such certification, Prime Contractor must provide the District with a list of all employees providing services pursuant to the Contract. In performing the services required pursuant to the Contract, Prime Contractor shall not allow any of its or its Subcontractors' employees who are not included on the above-referenced list to enter onto or remain in the vicinity of the Project Site. The Prime Contractor's failure to comply with these requirements shall be deemed and construed to be a material breach of the Contract, upon which it may be terminated, at District's sole discretion, without any further compensation to Prime Contractor.

**3.3.6 Noise, Drugs, Tobacco, Alcohol, and Animals.** Prime Contractor shall prohibit and take all steps necessary to ensure that its and its Subcontractors' employees do not possess, consume, or work under the influence of any alcohol, tobacco or illegal drugs while on the Project Site. The Prime Contractor shall take all necessary steps to ensure that its and its Subcontractor's employees comply with all applicable District policies and directives relating to appearance and behavior on school sites and/or District property. The Prime Contractor shall prohibit and prevent its and its Subcontractor's employees from playing any radios, I-Pods, MP3 players or similar devices, or wearing any earplug or headphones for entertainment or other non-Work purposes while working on the Project. The Prime Contractor shall prohibit and prevent its employees and Subcontractor's employees from bringing any animal onto the Project.

**3.3.7 Delivery of Material.** Prime Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Construction Schedule

for the Work as determined in accordance with Part 8 of these General Conditions. Prime Contractor shall, upon demand from the Architect or Construction Manager, furnish to the Architect or Construction Manager documentary evidence including, but not limited to, purchase orders, invoices, bills of materials, work orders and bills of lading, showing that orders have been placed.

**3.3.8 Liens and Other Security Interests of Subcontractors and Material Suppliers.** No material, supplies, or equipment for the Work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. Prime Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to District free from any claims, security interests, liens, or charges. Prime Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any Work covered by the Contract shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that Prime Contractor may install metering devices or other equipment of a utility company or political subdivision, title to which is commonly retained by the utility company or political subdivision. In the event of installation of any such metering device or equipment, Prime Contractor shall advise District as to its owner within five (5) days of such installation in writing, prior to making the installation.

**3.3.9 Title to Materials.** The title to new materials or equipment for the Work of the Contract, and attendant liability for its protection and safety, shall remain with Prime Contractor until incorporated in the Work of the Contract and accepted by the District, Construction Manager and Architect; no part of said materials shall be removed from its place of storage, and Prime Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative.

**3.3.10 Assemblies.** For all material and equipment specified or indicated in the Drawings, the Prime Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized in the Contract Documents in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications. Further, said assemblies shall be inspected and approved by the Inspector of Record prior to closing said assembly.

**3.3.11 Noise Control.** The Prime Contractor shall be responsible for the installation of noise reducing devices on construction equipment. Prime Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). If school is in session at any point during the progress of the Project, and, in the District's reasonable discretion, the noise from such Work disrupts or

disturbs the students or faculty or the normal operation of the school, at the District's request, the Prime Contractor shall schedule the performance of all such Work around normal school hours or make other arrangements so that the Work does not cause such disruption or disturbance. In no event shall Prime Contractor have a right to receive additional compensation or an extension to the Contract Time as a result of any such rescheduling or the making of such arrangements. These controls shall be implemented during site preparation and construction.

#### Section 3.4 WARRANTY

The Prime Contractor warrants to the District, Construction Manager and Architect that material and equipment furnished under the Contract shall be of the highest quality and new unless otherwise required or permitted by the Contract Documents, that the Work shall be free from defects not inherent in the quality required or permitted, and that the Work shall conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Prime Contractor's warranty to District includes, but is not limited to the following representations:

- (i) In addition to any other warranties provided elsewhere, Prime Contractor shall, and hereby does, warrant all Work and shall repair or replace any or all such Work, together with any other Work that may be damaged or displaced in so doing, that may prove defective in workmanship or materials within a two (2) year period from date of completion as determined in accordance with Public Contract Code Section 7107(c), without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects with reasonable promptness. Prime Contractor shall notify District upon completion of repairs.
- (ii) In the event of failure of Prime Contractor to comply with above mentioned conditions within forty-eight (48) hours after being notified in writing, District is hereby authorized to proceed to have defects repaired and made good at expense of Prime Contractor who shall pay costs and charges therefore immediately on demand.
- (iii) If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Section. If the Prime Contractor cannot be contacted or does not comply with the District's requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this Section, proceed to make such correction or attention which shall be charged against Prime Contractor. Such action by the District will not relieve the Prime Contractor of the guarantee provided in this Section or elsewhere in the Contract Documents.

This Section does not in any way limit the guarantee on any items for which a longer warranty is specified or on any items for which a manufacturer gives a guarantee for a longer period. Prime

Contractor shall furnish District all appropriate guarantee or warranty certificates upon completion of the Project.

### Section 3.5 TAXES

Prime Contractor shall pay all applicable federal, State of California, and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. District is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.

### Section 3.6 PERMITS, FEES AND NOTICES

**3.6.1 Payment.** The Prime Contractor shall verify that all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are necessary after execution of the Contract and are legally required by any authority having jurisdiction over the Project, except those required by the DSA, have been obtained. District shall be responsible for all testing and inspection as required by the DSA on-site or within the distance limitations set forth in Subsection 13.5.2, unless a different mileage range is specified in the Special Conditions.

**3.6.2 Compliance.** The Prime Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, or lawful order of public authorities bearing on performance of the Work.

**3.6.3 Responsibility.** The Prime Contractor shall perform all Work in conformance with every applicable law, statute, ordinance, building code, rule and regulation. The Prime Contractor shall assume full responsibility for conformance with such requirements and shall bear the cost of any and all corrections or Project delays arising from any failure to so comply.

**3.6.4 Payment.** The Prime Contractor shall initiate and pursue the application process for obtaining all permits and licenses (including all required District signatures) necessary for the prosecution of the Work, including utility fees. District will reimburse Prime Contractor the actual documented cost of such permits and fees, with no overhead or profit added. No reimbursement will be allowed for fees associated with City or County business licenses, disposals, trucking, *et cetera*.

### Section 3.7 LABOR COMPLIANCE PROGRAM

**3.7.1 Contractor/Subcontractor Registration.** A Contractor or Subcontractor shall not be qualified to bid on, be listed on a bid proposal (subject to the requirements of Public Contract Code section 4104), or engage in the performance of any contract for public work unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5, except under the limited circumstances set forth in Labor Code section 1771.1(a). This requirement shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work awarded on or after April 1, 2015. The District may not accept a bid or enter into a contract for a public works project with an unregistered contractor.

**3.7.2 Compliance Monitoring and Enforcement.** Pursuant to Labor Code section 1771.4, this Contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each Contractor and Subcontractor performing work on the Project shall be required to comply with the provisions of the California Labor Code, beginning with section 1720, and the regulations of the Department of Industrial Relations' Division of Labor Standards Enforcement (i.e., the Labor Commissioner), including, but not limited to, the standard provisions requiring payment of prevailing wages, maintenance and submission of certified payroll records, and the hiring of apprentices as appropriate. Unless otherwise specified, the Contractor shall be required to post job site notices regarding the requirements of this paragraph, as prescribed by regulation. For all new public works projects awarded on or after April 1, 2015, Contractor and each Subcontractor shall be required to furnish the records specified in Labor Code section 1776 directly to the Labor Commissioner at least monthly, or more frequently if specified in the Contract Documents, and in a format prescribed by the Labor Commissioner. This requirement shall apply to all projects, whether new or ongoing, on or after January 1, 2016.

**3.7.3 Posting.** Contractor shall be required to post a notice at the Project site in accordance with Title 8 of the California Code of Regulations, Section 16451.

#### Section 3.8 ABATEMENT SPECIFICATIONS

If applicable, Specifications for abatement of hazardous materials are set forth in the Special Conditions.

#### Section 3.9 DOCUMENTS AND SAMPLES AT THE PROJECT SITE

The Prime Contractor shall maintain at the Project Site for the District one current copy of the Uniform Building Code, Titles 19, 21 and 24 of the California Code of Regulations and one record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Prime Contractor shall maintain at the Project Site approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the Architect or Construction Manager and shall be delivered to the Architect or Construction Manager for delivery to the District upon completion of the Work.

#### Section 3.10 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

##### **3.10.1 Submittals Defined.**

**3.10.1.1 Shop Drawings.** The term "shop drawings" as used herein means drawings, diagrams, schedules, and other data, which are prepared by Prime Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting drawings; manufacturer's standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all 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 their position conform to the requirements of the Contract Documents. The Prime Contractor shall obtain and submit with shop drawings all seismic and other calculations and all product data from equipment manufacturers. "Product data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Prime Contractor to illustrate a material, product, or system for some portion of the Work. As used herein, the term "manufactured" applies to standard units usually mass-produced, and "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining Work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

**3.10.1.2**        *Samples.* The term "samples" as used herein are physical examples furnished by Prime Contractor to illustrate materials, equipment, or quality and includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the Architect to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, *et cetera*, proposed by the Prime Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

**3.10.1.3**        *Prime Contractor's Responsibilities.* Prime Contractor shall obtain and shall submit all required shop drawings, samples, *et cetera*, in accordance with Prime Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in the Specifications with such promptness as to cause no delay in its own Work or in that of any other Prime Contractor or Subcontractor but in no event later than thirty (30) days after Notice of Award. No extensions of time shall be granted to Prime Contractor or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the schedule. Each Subcontractor shall submit all shop drawings, samples, and manufacturer's descriptive data for the review of the District, the Prime Contractor, Construction Manager and the Architect through the Prime Contractor. By submitting shop drawings, product data, samples, *et cetera*, the Prime Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents, including the Construction Schedule. The submission of the shop drawings, product data, samples, *et cetera*, shall not deviate from the requirements of the Contract Documents including detailing and design intent which is specifically outlined in Contract Documents except as specifically authorized by the Construction Manager or the Architect or through an accepted substitution pursuant to Subsection 3.10.4. All deviations from the Contract Documents shall be narratively described in a transmittal accompanying the shop drawings. However, shop drawings shall not be used as a means of requesting a substitution, the procedure for which is defined in Subsection 3.10.4, "Substitutions." Review by District, Construction Manager and Architect shall not relieve the Prime Contractor or any Subcontractor

from its responsibility in preparing and submitting proper shop drawings in accordance with the Contract Documents. Any submission, which in Architect's opinion is incomplete, contains errors, or has been checked superficially will be returned unreviewed by the Architect for resubmission by the Prime Contractor. Prime Contractor shall stamp, sign, and date each submittal indicating its representation that the submittal meets all of the requirements of the Contract Documents and evidence Prime Contractor's review through execution of the following stamp to be placed on each shop drawing:

"The Prime Contractor has reviewed and approved the field dimensions and the construction criteria, and has also made written notation regarding any information in the shop drawings that does not conform to the Contract Documents. This shop drawing has been coordinated with all other shop drawings received to date by Prime Contractor and this duty of coordination has not been delegated to subcontractors, material suppliers, the Construction Manager, the Architect on this Project.

---

Signature of Prime Contractor and Date"

**3.10.1.4** *Extent of Review.* In reviewing shop drawings, the Architect will not verify dimensions and field conditions. The Architect will review and approve shop drawings, product data, samples, *et cetera*, for aesthetics and for conformance with the design concept of the Work and the information in the Contract Documents. The Architect's review shall neither be construed as a complete check which relieves the Prime Contractor or any Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the Prime Contractor has, in writing, called the Architect's attention to the deviations at the time of submission. The Architect's review shall not relieve the Prime Contractor or any Subcontractor from responsibility for errors of any sort in shop drawings or schedules, for proper fitting of the Work, coordination of the differing Subcontractor trades and shop drawings and Work which is not indicated on the shop drawings at the time of submission of shop drawings. Prime Contractor and Subcontractors shall be solely responsible for any quantities which may be shown on the submittals or Contract Documents.

### **3.10.2 Drawing Submission Procedure.**

**3.10.2.1** *Transmittal Letter and Other Requirements.* All shop drawings must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification Section number for identification of each item clearly stating in narrative form, as well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents. Shop drawings, for each section of the Work shall be numbered

consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the Prime Contractor. Each drawing shall have a clear space for the stamps of Architect and Prime Contractor.

**3.10.2.2** *Copies Required.* Each submittal shall be provided electronically as required to the Construction Manager who will post them to the project files so that all parties have access. Submittals shall include drawings or schedules, tables, cut sheets, *et cetera*, including fabrication, erection, layout and setting drawings, and such other drawings as required under the various Sections of the Specifications, until final acceptance thereof is obtained. Prime Contractor shall submit: (1) manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; (2) wiring diagrams and controls; (3) schedules; (4) all seismic calculations and other calculations; and (5) other pertinent information as required by the District or Architect.

**3.10.2.3** *Corrections.* The Prime Contractor shall make all corrections required by Architect and shall resubmit, as required by Architect, corrected shop drawings or new samples until approved. Prime Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than one (1) re-review of required submittals of shop drawings, product data, or samples are subject to charge to the Prime Contractor pursuant to Section 4.4.

**3.10.2.4** *Approval Prior to Commencement of Work.* No portion of the Work requiring a shop drawing or sample submission or other submittal shall be commenced until the submission has been reviewed by Prime Contractor and Architect and approved by Architect unless specifically directed in writing by the Architect. All such portions of the Work shall be in accordance with approved shop drawings and samples. Upon approval by the Architect, the Contractor shall provide two printed copies of the approved documents for use by the Construction Manager and the Inspector on site and any other copies needed on site for the Contractor and its Subcontractors to implement the approved products and procedures.

### **3.10.3 Sample Submissions Procedure.**

**3.10.3.1** *Samples Required.* In case a considerable range of color, graining, texture, or other characteristics are anticipated in finished products, a sufficient number of samples of the specified materials shall be furnished by the Prime Contractor to indicate the full range of characteristics which will be present in the finished products; and products delivered or erected without submittal and approval of a full range of samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various Sections of the Specifications, the Prime Contractor shall submit samples in duplicate. All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted and the date, and shall be accompanied by a letter of transmittal containing similar information, together with the Specification Section number. Each tag or sticker shall have clear space for the review stamps of Prime Contractor and Architect.

**3.10.3.2**      *Labels and Instructions.* Each sample of materials shall be supplied with the manufacturer's descriptive labels and application instructions.

**3.10.3.3**      *Architect's Review.* The Architect will review and, if appropriate, approve submissions and will return them to the Prime Contractor with the Architect's stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the Architect's (or District's) standard procedures.

**3.10.3.4**      *Record Drawings and Annotated Specifications.* The Prime Contractor shall prepare and maintain on a current basis an accurate and complete set of Record Drawings clearly showing all changes, revisions to Specifications and substitutions during construction, including, without limitation, field changes and the final location of all electrical and mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features, and Annotated Specifications showing clearly all changes, revisions, and substitutions during construction. A copy of such Record Drawings and Annotated Specifications shall be delivered to District in accordance with the Prime Contractor's approved Construction Schedule. In case a Specification allows Prime Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Prime Contractor has furnished. The Prime Contractor shall update the Record Drawings and Annotated Specifications as often as necessary to keep them current, but no less often than weekly. The Record Drawings and Annotated Specifications shall be kept at the Project Site and available for review and inspection by the District, the Construction Manager and the Architect. On completion of the Work and prior to Application for Final Payment, the Prime Contractor shall provide three (3) complete sets of Record Drawings and Annotated Specifications to the District, certifying them to be a complete and accurate reflection of the actual construction conditions of the Work.

**3.10.3.5**      *Equipment Manuals.* Prime Contractor shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various Sections of the Specifications for each division of the Work. The manuals shall be arranged in logical, sequential order, labeled, indexed, and placed in white-colored three-ring binders. The binders shall be tabbed and labeled on the spine with the project Title and bid number assigned. The binders shall also contain Subcontractor and vendor contact information. Upon completion of the Work, the Prime Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of its Application for Final Payment, and as an additional condition to the approval by the Architect of the Application for Final Payment, the Prime Contractor shall deliver the binders, arranged in logical, sequential order, labeled, indexed, endorsed, to the Construction Manager, who shall review them for completeness, and submit them to the District through the Architect.

**3.10.3.6**      *District's Property.* All shop drawings, computer disks, annotated Specifications, samples and other submittals shall become the District's property upon receipt by the District or Architect.

### **3.10.4 Substitutions.**

**3.10.4.1**      *One Product Specified.* Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words “or equal,” such Specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words “or equal.” Unless the Contract Documents provide otherwise, the Prime Contractor, to the extent provided in Section 3.10.4.3, may offer in place of any item specified in the Drawings or other Contract Documents (“Specified Item”) any material, process, article, *et cetera* that the Prime Contractor can demonstrate is materially equal or better in every respect to the Specified Item and that will completely accomplish the purpose of the Contract Documents.

**3.10.4.2**      *Commercially Unavailable Products.* If the Prime Contractor failed to request substitutions for products prior to the submission of its bid, and such products subsequently become commercially unavailable, the Prime Contractor may request a substitution for such commercially unavailable item. The decision to grant any such request is solely at the District’s discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The District may condition its approval of the substitution upon the delivery to District of an extended warranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the Contract Price should the substituted item cost less than the Specified Item. The requesting party shall bear all risks of delay due to the approval of a requested substitution by the DSA or any other governmental agency having jurisdiction. All additional costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of the Prime Contractor and shall be deducted from Prime Contractor’s pay request.

**3.10.4.3**      *Request Form and Procedures.* A request for substitution of a product, material or process in place of a Specified Item must in writing on the District’s Substitution Request Form (“Request Form”). Substitution requests made prior to the Prime Contractor submitting its bid for the Project shall be made in accordance with the procedures described in the Instructions for Bidders. Substitution requests made after the Prime Contractor submitted its bid may be made only in accordance with Subsection 3.10.4.2.

**3.10.4.4**      *Substantiating Data.* With its Request Form, a bidder must submit all documents relevant to whether the proposed substitution will or will not:

- (i) be equal to or better than the Specified Item with respect to quality and serviceability;
- (ii) entail no changes in detail, construction, and scheduling of related Work;
- (iii) be acceptable considering the required design and artistic effect;

- (iv) provide any cost disadvantage to the District;
- (v) require any excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
- (vi) require any change of the Construction Schedule.

The documentation submitted must include any and all illustrations, specifications, and other data relevant to the request. Without limiting the generality of the foregoing, such documentation must include: (1) catalog and other information that describes the proposed substitute item and substantiates that it is equal or better in all material respects than the Specified Item; (2) a statement of the cost implications of the proposed substitute item, stating whether and why the substitution will reduce or increase the Contract Price; and (3) information regarding the durability and life cycle cost of the proposed substituted item. Such documentation also must include a signed affidavit from the Prime Contractor stating that the proposed substitute item is equal to or better than the Specified Item in all material respects. The District may reject a request for substitution that does not include the required affidavit and all substantiating data reasonably necessary for the District to determine whether to grant the substitution request. The District may at any time request that the Prime Contractor provide additional information relevant to any substitution request. If the Prime Contractor intentionally or negligently omits information relevant to the District's determination and such information is adverse to a finding of equality, the Prime Contractor will have breached its obligations pursuant to the Contract.

**3.10.4.5**      *District Determination.* After the District receives all evidence that the Prime Contractor intends will substantiate a request for substitution, the District will determine whether to grant the request for substitution. The decision whether a proposed substitution is equal to or better than a Specified Item shall be at the sole discretion of the District, after consultation with the Architect and the Construction Manager as applicable.

If the District denies the request for substitution of a Specified Item, the Prime Contractor shall provide the Specified Item without any additional cost or charge to the District.

If the District grants a request for substitution of a Specified Item, the substitution shall be documented and processed by means of a Change Order. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to approval by the DSA or any other governmental agency having jurisdiction shall be on the bidder.

If the District approves a proposed substitution, the Prime Contractor shall pay for all engineering and design services, including, without limitation, compensation to the Architect and affected engineers for their required time to process such substitution through the DSA, if required, and to make all changes and adjustments in materials or the Work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

**3.10.5 List of Manufacturers and Products Required.** The Prime Contractor shall require that, within fifteen (15) days of the date of execution of its subcontract, each Subcontractor prepare and submit to the Prime Contractor a comprehensive list of the manufacturers and products proposed for the Project, including information on materials, equipment, and fixtures required by the Contract Documents, as may be required for the Prime Contractor's or Architect's approval. Approval of the list of products shall not be construed as a substitute for the shop drawings, manufacturer's descriptive data, and samples, required by the Contract Documents, but rather shall be considered as a base from which more detailed submittals shall be developed for final review by the Prime Contractor and the Architect.

**3.10.6 Deferred Approvals.** Deferred approvals shall be submitted and processed pursuant to the requirements of Division 01 of the Specifications (Prime Contractor to verify). All deferred approvals shall be prepared by Prime Contractor or Prime Contractor's agent early enough so as to not delay the Project. Prime Contractor is aware that Title 21 California Code of Regulations Section 17(g) and Title 24 California Code of Regulations Section 4-317 have specific requirements for deferred approval as to governing agencies and as to the Architect for the Project. As a result, the Prime Contractor shall be solely responsible for any delay associated with the time for approval by applicable agencies, the Architect or Architect's consultants.

## Section 3.11 INTEGRATION OF WORK

**3.11.1 Scope.** The Prime Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. Prime Contractor shall be responsible for ensuring that all trades are coordinated and scheduled so as to ensure the timely and proper execution of the Work. When modifying existing Work or installing new Work adjacent to existing Work, Prime Contractor shall match, as closely as conditions at the Project Site and materials will allow, the finishes, textures, and colors of the original Work, refinishing existing Work at no additional cost to District. All cost caused by defective or ill-timed Work shall be borne by Prime Contractor. Prime Contractor shall be solely responsible for protecting existing Work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.

**3.11.2 Structural Members.** New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the Architect. Work done contrary to such authority is at the Prime Contractor's risk and subject to replacement at its own expense without reimbursement under the Contract. The Prime Contractor shall be solely responsible for any delay associated with approval by applicable agencies, the Architect or Architect's consultants of any unauthorized Work.

**3.11.3 Subsequent Removal.** Permission to patch any areas or items of the Work shall not constitute a waiver of the District's or the Architect's right to require complete removal and replacement of the areas or items of the Work if, in the opinion of the Architect or the District, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract Documents.

### Section 3.12 CLEANING UP

Prime Contractor at all times shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Prime Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Should trash and debris become an identified hazard to students and staff, the Prime Contractor shall immediately remove such a hazard, after written notice from the Construction Manager. Upon failure to remove said hazard within 48 hours of written notice, The District will remove said hazard and issue a deductive change order to the Prime Contractor for the cost to perform such Work.

Prime Contractor shall remove rubbish and debris resulting from the Work on a daily basis. Prime Contractor shall maintain the structures and the Project Site in a clean and orderly condition at all times until acceptance of the Project by the District. Prime Contractor shall keep its access driveways and adjacent streets, sidewalks, gutters and drains free of rubbish, debris and excess water by cleaning and removal each day.

### Section 3.13 ACCESS TO WORK

The Prime Contractor shall provide the District, the Construction Manager, the Architect, and the Project Inspector access to the Work in preparation and progress wherever located. Prime Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions.

### Section 3.14 ROYALTIES AND PATENTS

**3.14.1 Payment and Indemnity for Infringement.** Prime Contractor shall hold and save the District, Construction Manager and their respective officers, agents, and employees, the Architect, and the Architect's consultants harmless from liability of any nature or kind, including cost and expense, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the District, unless otherwise specifically provided in the Contract Documents, and unless such liability arises from the sole negligence, or active negligence, or willful misconduct of the District, the Construction Manager, the Architect, or the Architect's consultants.

**3.14.2 Review.** The review by the Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by the Prime Contractor in violation of any patent or other rights of any person or entity.

### Section 3.15 INDEMNIFICATION

**3.15.1 Indemnification of District.** Prime Contractor shall defend, indemnify and hold harmless District, Architect, Construction Manager, Project Inspector, the State of California and their officers, employees, agents and independent contractors (each a "District Indemnitee")



from all claims, demands, actions, liens, judgments, damages, losses, costs or expenses (including, without limitation, attorneys' fees), or other liabilities of any nature: (I) arising from death, personal injury or property damage that occurs in connection with the performance of the Work by the Prime Contractor or its Subcontractors; or (ii) arising from any act, omission, or breach by the Prime Contractor or any of its officers, employees, agents and Subcontractors in connection with the Work or performance of the Contract by the Prime Contractor or its Subcontractors. The foregoing shall include, without limitation, all claims, demands, actions, liens, judgments, damages, losses, costs or expenses, or other liabilities incurred by reason of:

- (i) Liability for (a) death or bodily injury to persons; (b) damage or injury to, loss (including theft), or loss of use of, any property; (c) any failure or alleged failure to comply with any provision of law or the Contract Documents; or (d) any other loss, damage or expense, sustained by any person, firm or corporation or in connection with the Work called for in the Contract Documents.
- (ii) Any bodily injury to or death of persons or damage to property caused by any act, omission or breach of Prime Contractor or any person, firm or corporation employed by Prime Contractor, either directly or by independent contract, including all damages or injury to, loss (including theft), or loss of use of, any property, sustained by any person, firm or corporation, including District, arising out of or in any way connected with Work covered by the Contract Documents, whether said injury or damage occurs either on or off District property.
- (iii) Any dispute between Prime Contractor and any Subcontractor, supplier, surety or other party, including, without limitation, any failure or alleged failure of the Prime Contractor (or any person hired or employed directly or indirectly by the Prime Contractor) to pay any Subcontractor or material suppliers of any tier or any other person employed in connection with the Work and/or filing of any stop payment notice or mechanic's lien claims.
- (iv) Breach of any warranty, express or implied.
- (v) Failure of the Prime Contractor or its Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement.
- (vi) Products installed in or used in connection with the Work.

**3.15.2 Defense of District.** Prime Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings within the scope of Subsection 3.15.1 that may be brought or instituted against any District Indemnitee, and shall pay or satisfy any judgment that may be rendered against any such District Indemnitee in any such action, suit or other proceedings. Any defense of the District shall be by competent and experienced legal counsel reasonably satisfactory to the District, but selected, retained and compensated by the Prime Contractor.

**3.15.3 Limitation on Prime Contractor Liability.** Notwithstanding anything to the contrary, the Prime Contractor shall not be responsible pursuant to this Section 3.15 to the extent a claim, demand, action, lien, judgment, damage, loss, cost or expense, or other liability is the result of the active negligence or willful misconduct of the District.

**3.15.4 Subcontractor Indemnification of District.** Prime Contractor shall ensure that its contract with each Subcontractor contains provisions requiring the Subcontractor to defend, indemnify and hold harmless the District Indemnitees to the same extent as set forth in this Section.

## Section 3.16 RULES OF CONDUCT

**3.16.1 Personal Behavior.** Each person performing any of the Work or present on the Project Site, whether employed by Prime Contractor, any Subcontractor, Architect, engineer, Construction Manager, or other party, when on or at the Project Site, shall adhere to the following rules of conduct:

- (i) Professional and courteous conduct is expected and shall be displayed at all times.
- (ii) Interaction with students, staff, and/or other visitors is prohibited with the exception of designated administrators.
- (iii) The use of profanity and/or disparaging language shall not be tolerated.
- (iv) Employees of the Prime Contractor and all Subcontractors will be issued a badge by the District or designee, as an individual means of identification. The badge is to be worn at all times while on the District's property. The badge shall be visibly noticeable and located on the front of the individual's shirt. All badges are required to be returned to the District or designee at the completion of the project as part of the final pay application requirements.
- (v) Employees of the Prime Contractor and all Subcontractors shall remain in the immediate vicinity of his/her Work and shall not stray to other areas of the property that do not involve their company's scope of Work. All restroom facilities, including student and staff, are not to be used. The Prime Contractor is responsible for mobilizing to the Project Site its own portable restroom.
- (vi) All Prime Contractor and all Subcontractors vehicles must be parked each day in the designated area prior to the start of the school day and removed after the end of the school day. If for some unforeseen reason a vehicle needs to be removed during school hours, the vehicle shall have lights and flashers engaged, and a "spotter," provided by the Prime Contractor and/or Subcontractor, leading the vehicle off of the District's property. At no time shall the vehicle exceed 5 mph.

(vii) Each prime contractor shall provide and coordinate with the District's Construction Manager all traffic and pedestrian control for Contractor's own operations, including that of suppliers. Any special permits for this requirement will be the contractor's responsibility.

(viii) Each prime contractor shall budget a minimum of five man hours per week for site cleanup for the duration of the project, whether work is being performed or not.

(ix) The District's property is a drug-free workplace. This policy shall be strictly enforced.

(x) Alcoholic beverages are prohibited from being brought on or consumed on any portion of the District's property.

(xi) The use of any tobacco products on the District's property is strictly prohibited.

(xii) Any lewd, obscene or otherwise indecent acts, words, or behavior by any employee of the Prime Contractor or any Subcontractor shall not be tolerated.

(xiii) Employees of the Prime Contractor and all Subcontractors shall conform to a dress code whereby no clothing that contains violent, suggestive, derogatory, obscene, or racially based material may be worn. This interpretation will be made by the District or designee. Garments, accessories or personal grooming artifacts with slogans, graphics, or pictures promoting drugs, alcohol, tobacco, or any other controlled substances that are prohibited to minors shall not be allowed. Tank top/midriff shirts and shorts of any kind are not allowed while on the District's property.

**3.16.2 Communications.** The Prime Contractor and all Subcontractors are responsible for their own means of communication including, but not limited to, telephone, cell phone, and fax machine. At no time are the District's communication systems to be used.

**3.16.3 Vehicles.** All Prime Contractor and Subcontractors' personal vehicles, work vehicles and equipment are the responsibility of the individual owner and/or his or her company. Any damage that occurs to the vehicles and/or equipment while on the District's property is not the responsibility of the District and, therefore, any claims for damages will not be acknowledged.

**3.16.4 Access to Project Site.** Only personnel working on the Project will be allowed to enter the Project Site. No transient vendors, portable food service entities or others will be allowed to enter the campuses.

**3.16.5 Not Exclusive Requirements.** The rules of conduct set forth in this Section 3.16 are in addition to any other such requirements set forth elsewhere in the Contract Documents.

**3.16.6 Non-Compliance.** If any person at or on the Project Site by reason of the Prime Contractor or any of its Subcontractors fails to comply with any of the rules of conduct set forth in this Section 3.16 or elsewhere in the Contract Documents, upon direction by the District, the Prime Contractor shall immediately remove such person from the Project Site, and such person may not return to the Project Site without the express written consent of the District. The Prime Contractor's failure to comply with these provisions shall be deemed a breach of its obligations pursuant to the Contract.

## **PART 4 ADMINISTRATION OF THE CONTRACT**

### **Section 4.1    ADMINISTRATORS**

**4.1.1 Architect.** The Architect will be a District representative during all phases of the planning, design, bidding, construction and close-out of the Project. The Architect is charged with general observation of the Work and interpretation of the Contract Documents, as well as other duties set forth in the agreement between the District and the Architect. The Architect will advise the District regarding compliance with the Contract Documents and is authorized to stop the Work as the Architect determines necessary. Communications from the District to bidders prior to award of a contract for the Project may be directed through the Architect.

**4.1.2 Construction Manager.** If so indicated in the Special Conditions, the District has contracted for construction management services to be provided by the Construction Manager.

**4.1.2.1        *District Representative.*** The Construction Manager will be a District representative during all phases of the bidding, construction and close-out of the Project. The Construction Manager will advise and consult with the District. All communications from the Prime Contractor to the District or the Architect shall be directed through the Construction Manager. All communications to the Prime Contractor from the District or the Architect shall be directed through the Construction Manager except as determined by the District or as set forth in the District's agreements with the Construction Manager and/or the Architect.

**4.1.2.2        *Construction Manager Access.*** The Construction Manager shall at all times have access to the Work wherever it is in preparation and progress, whether on-site or off-site. The Prime Contractor shall provide facilities for such access so that the Construction Manager may perform its functions under the Contract Documents.

**4.1.2.3        *Construction Manager Responsibilities.*** The Construction Manager, under the direction of the District and in cooperation with the Architect, shall provide services in accordance with the agreement between the District and the Construction Manager, which services may include, but are not limited to:

- (i) Administrative, management and related services as required to coordinate the Work of the Prime Contractor with the work of any other contractors and with the activities and responsibilities of the Construction Manager, the District and the Architect, in efforts to ensure completion of the Project in accordance with the District's objectives for cost, time and quality.
- (ii) Scheduling and conducting pre-construction, construction, and progress meetings to discuss such matters as procedures, progress problems and scheduling.
- (iii) Determining whether the Work of the Prime Contractor is being performed in accordance with the requirements of the Contract Documents and endeavoring to guard against defects and deficiencies in the Work.
- (iv) Informing the District and the Architect of Work believed not to conform to Contract Documents.
- (v) Making recommendations to the Architect regarding any special inspection or testing of any Work that does not conform to the Contract Documents, whether or not such Work is then fabricated, installed or completed.
- (vi) Consulting with the Architect and District if the Prime Contractor requests interpretations of the meaning and intent of the Drawings and Specifications, and assisting in the resolution of questions that may arise.
- (vii) Receiving Certificates of Insurance from the Prime Contractor and its Subcontractors, and forwarding them to the District.
- (viii) In collaboration with the Architect, establishing and implementing procedures for expediting the processing and approval of shop drawings, product data, samples and other submittals.
- (ix) Receiving and reviewing all shop drawings, product data, samples and other submittals; coordinating those submittals with information contained in related documents; and transmitting the same to the Architect for review and approval.
- (x) Preparing, maintaining and monitoring the Project schedule and all critical path items.
- (xi) Ensuring Project Site clean-up and providing and removing temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities on the Project Site.

**4.1.2.4 Construction Manager Authority.** In addition to any authority the Architect may have, the Construction Manager has the authority to reject Work that does not conform to the Contract Documents, and to require special inspection or testing. Whenever, in the Construction Manager's opinion, it is considered necessary or advisable for the implementation of the intent of the Contract Documents, the Construction Manager may require special inspection or testing of the Work whether or not such Work is then fabricated, installed or completed. The Construction Manager has the authority to suspend or stop the Work, in whole or in part, if the Prime Contractor fails to correct defective Work as required or fails to carry out the Work or to supply a sufficient amount of skilled labor or suitable materials or equipment in such a way that assures that the Work will be completed in accordance with the Contract Documents. The Construction Manager also has the authority to suspend the Work, in whole or in part, for such periods as the Construction Manager may deem necessary to coordinate the Work with the Work of the District or separate contractors or for conditions considered unfavorable for the suitable prosecution of the Work. The Prime Contractor and each of its Subcontractors shall immediately comply with the orders of the Construction Manager and, if the Work is stopped, shall not resume the Work until ordered by the Construction Manager.

**4.1.2.5 Limitations on Authority and Responsibility.** The District must approve all Change Orders, and the Construction Manager is not authorized to amend any of the Contract Documents or order any change to the Work if the change would require a Change Order. In no event shall the Construction Manager be responsible for constructions means, methods, techniques, and procedures employed by the Prime Contractor in the performance of the Contract, and the Construction Manager shall not be responsible for the failure of the Prime Contractor to carry out Work in accordance with the Contract Documents.

**4.1.3 Project Inspector.** The Project Inspector(s) employed by the District and approved by the Division of the State Architect shall provide continuous observation of the Work as described in more detail in Section 4.3 of these General Conditions.

**4.1.4 Replacement Representatives.** If the District terminates the Architect or Construction Manager, the District may appoint a replacement to perform the functions of the terminated professional. The status of the replacement Architect or Construction Manager under the Contract Documents shall be the same as that of the former Architect or Construction Manager.

## Section 4.2 ADMINISTRATION OF THE CONTRACT

**4.2.1 Status.** Pursuant to Title 24 and Title 21 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 17280 *et seq.* the Construction Manager and the Architect will provide administration of the Contract Documents and the Work, and will be the District's representative during construction, as well as during the two (2) year period following the commencement of any warranties. The Construction Manager and the Architect will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

**4.2.2 Architect's Site Visits.** The Architect will visit the Project Site at intervals necessary in the judgment of the Architect to become generally familiar with the progress and quality of the Work and to determine in general if the Work is being performed in accordance with the Contract Documents.

**4.2.3 Limitations of Construction Responsibility.** The Architect or Construction Manager shall not have control over, charge of, or be responsible for construction means, methods, techniques, procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Prime Contractor's responsibility under the Contract Documents. The Architect or Construction Manager shall not be responsible for the Prime Contractor's, Subcontractors', material or equipment suppliers', or any other person's failure to carry out the Work in accordance with the Contract Documents. The Architect or Construction Manager shall not have control over or charge of acts or omissions of the Prime Contractor, Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. The Prime Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect or Construction Manager in the Architect or Construction Manager's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than the Prime Contractor.

**4.2.4 Communications Facilitating Contract Administration.** Except as otherwise provided in the Contract Documents or when direct communications are warranted by special circumstances, the District and the Prime Contractor shall communicate through the Construction Manager. Where direct communication is necessary between the District and the Prime Contractor, the District's communication shall be through the District's authorized designee. The Construction Manager shall be promptly informed, and shall receive copies of all written communications. Prime Contractor shall not rely upon any communication from the District that is not from the District's authorized designee. Communications by and with the Architect's consultants shall be through the Construction Manager. Communications by and with Subcontractors and material or equipment suppliers shall be through the Prime Contractor.

**4.2.5 Payment Applications.** The Construction Manager will review and make recommendations to the District regarding the amounts due the Prime Contractor on the Certificates for Payment pursuant to Part 9 and subject to the Project Inspector's approval and Architect or Construction Manager's observation.

**4.2.6 Rejection of Work.** In addition to the rights, duties, and obligations of the Project Inspector under this Part, the Architect or Construction Manager may recommend to the District that the District reject Work which does not conform to the Contract Documents. Whenever the Architect or Construction Manager considers it necessary or advisable to achieve the intent of the Contract Documents, the Architect or Construction Manager may recommend to the District that the District require additional inspection or testing of the Work in accordance with Section 13.5, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the Architect or Construction Manager nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the

Architect or Construction Manager to the Prime Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

**4.2.7 Warranties Upon Completion.** The Architect and Construction Manager, in conjunction with the Project Inspector, will conduct field reviews of the Work to determine the date of completion, shall receive and forward to the District for the District's review and records written warranties and related documents required by the Contract and assembled by the Prime Contractor, and will issue a final Certificate for Payment when the Architect and Construction Manager believe the Work has been completed in compliance with the requirements of the Contract Documents and after receiving and filing the Contractor's DSA form 6. The handling by the Architect or Construction Manager of such warranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect or Construction Manager any responsibilities or liabilities required by the Contract Documents of the Prime Contractor or other entities, parties, or persons performing or supplying the Work.

The Construction Manager and the Architect will conduct a field review of the Prime Contractor's comprehensive list of items to be completed or corrected (final punch-list) and one (1) follow-up field review if required. The cost incurred by the District for further field reviews or the preparation of further punch-lists by the Architect or Construction Manager shall be invoiced to the Prime Contractor and deducted from the final payment.

**4.2.8 Interpretation.** The Architect will interpret and decide matters concerning performance and requirements of the Contract Documents. The Architect's decision in such matters is final for the purpose of the Prime Contractor proceeding with the Work.

**4.2.9 Additional Instructions.**

**4.2.9.1** *Typical Parts and Sections.* Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are essentially of the same construction are shown in outline only, the complete details shall apply to the Work which is shown in outline.

**4.2.9.2** *Dimensions.* Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Architect shall supply them on request. The Architect's decisions on matters relating to aesthetic effect will be final.

Section 4.3 PROJECT INSPECTOR

**4.3.1 General.** One or more Project Inspectors employed by the District and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Project Inspector(s) duties are as specifically defined in Title 24.



**4.3.2 Project Inspector's Duties.** All Work shall be under the observation of the Project Inspector. The Project Inspector shall have unlimited access to any or all parts of the Work at any time. The Prime Contractor shall furnish the Project Inspector such information as may be necessary to keep the Project Inspector fully informed regarding progress and manner of Work and character of materials. The Prime Contractor shall forward inspection requests, in writing, forty-eight (48) hours in advance of any required inspections. Such observations shall not, in any way, relieve the Prime Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Prime Contractor's responsibility for providing efficient and capable superintendence. The Project Inspector is not authorized to make changes in the Drawings or Specifications nor shall the Project Inspector's approval of the Work and methods relieve the Prime Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

**4.3.3 Project Inspector's Authority to Reject or Stop Work.** The Project Inspector shall have the authority to reject Work whenever provisions of the Contract Documents are not being complied with, and Prime Contractor shall instruct its Subcontractors and employees accordingly. In addition, the Project Inspector may stop any Work that poses a probable risk of harm to persons or property. The Prime Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, *et cetera*, accordingly. The absence of any Stop Work order or rejection of any portion of the Work shall not relieve the Prime Contractor from any of its obligations pursuant to the Contract Documents.

**4.3.4 Project Inspector's Facilities.** The Construction Manager shall provide the Project Inspector with the temporary facilities as required under Division 1 of the Specifications.

**4.3.5 Testing Times.** The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Prime Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Prime Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Prime Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Prime Contractor.

#### Section 4.4 ADDITIONAL CHARGES FOR PROFESSIONAL SERVICES

If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services for any reason by any act of the Prime Contractor, the Prime Contractor shall be invoiced by the District for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. Such invoicing shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. As an example, the District's remedy of assessing and collecting liquidated damages shall not preclude the District from obtaining reimbursement from the Prime Contractor and/or Surety for the cost of additional services incurred under this Section. If payments then or thereafter due to the Prime Contractor are not

sufficient to cover such amounts, the Prime Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

- (i) Services made necessary by the default of the Prime Contractor.
- (ii) Services made necessary due to the defects or deficiencies in the Work of the Prime Contractor.
- (iii) Services required by failure of the Prime Contractor to perform according to any provision of the Contract Documents.
- (iv) Services in connection with evaluating substitutions of products, materials, equipment, and Subcontractors proposed by the Prime Contractor, and making subsequent revisions to Drawings and Specifications, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available).
- (v) Services for evaluating and processing Claims submitted by the Prime Contractor in connection with the Work outside the established Change Order process.
- (vi) Services required by the failure of the Prime Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- (vii) Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
- (viii) Services in conjunction with more than one (1) re-review of submittals of shop drawings, product data, samples, *et cetera*.

#### Section 4.5 CLAIMS AND LEGAL PROCEEDINGS

**4.5.1 Definition of Claim.** A "Claim" means a separate demand by the Prime Contractor for (i) time extension, (ii) payment of money or damages arising from Work done by or on behalf of the Prime Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or to which the claimant is not otherwise entitled, or (iii) an amount the payment of which is disputed by the District. A Claim involving a request or demand for extension of time may not be filed prior to the Prime Contractor complying with all requirements of Section 8.4 of these General Conditions.

**4.5.2 Mandatory Timeline for Filing Claim.** The Prime Contractor must submit a Claim within fourteen (14) calendar days of the date the Prime Contractor becomes aware or reasonably should have been aware of any basis for the Claim. If the Prime Contractor fails to submit a Claim within such fourteen (14) day period, the Prime Contractor shall be deemed to have forfeited and waived any and all rights to assert the Claim on any basis, or to initiate and

pursue file any legal action or other proceeding arising from any such basis. In addition, any Claim submitted after the District issues final payment to the Prime Contractor in accordance with the Contract Documents shall be null and void and will be rejected.

FAILURE TO SUBMIT A CLAIM WITHIN THE TIME PERIODS REQUIRED PURSUANT TO THIS ARTICLE SHALL RESULT IN FORFEITURE AND WAIVER BY THE PRIME CONTRACTOR OF ANY AND ALL RIGHTS TO ASSERT THE CLAIM ON ANY BASIS OR TO INITIATE AND PURSUE ANY LEGAL ACTION OR OTHER PROCEEDING RELATED THERETO.

**4.5.3 Claim Format.** Each Claim shall be set forth in the format and with the supporting documentation described as follows:

- (I) A cover letter including a summary of the factual basis for the Claim, the amount of the Claim, and a summary of the basis for the Claim, including the specific clause and Section under the Contract relevant to the Claim;
- (ii) An attachment to the cover letter setting forth detailed analyses, justifications, arguments and legal authorities supporting the Claim, with cross-references to documents submitted in support of the Claim; and
- (iii) All documents relevant to and/or supporting the Claim, including, by way of example and not as a limitation, any Specifications, Drawings, response to a Request for Interpretation, analysis of Claim cost, analysis of the affect on the critical path, a chronology of events and related correspondence, and/or daily reports and logs.

**4.5.4 Mandatory Certification of Claim.**

**4.5.4.1** *Submission with Claim.* The Prime Contractor must certify each Claim, in writing, by submitting the certification described in this Subsection 4.5.4 with the Claim. Such certification is a required element of each Claim and, if the Prime Contractor fails to submit the required certification, the Prime Contractor shall be deemed to have forfeited and waived any and all rights to assert the Claim on any basis, or to initiate and pursue file any legal action or other proceeding arising from any such basis.

FAILURE TO CERTIFY A CLAIM IN ACCORDANCE WITH THIS ARTICLE SHALL RESULT IN FORFEITURE AND WAIVER BY THE PRIME CONTRACTOR OF ANY AND ALL RIGHTS TO ASSERT THE CLAIM ON ANY BASIS OR TO INITIATE AND PURSUE ANY LEGAL ACTION OR OTHER PROCEEDING ARISING THEREFROM.

**4.5.4.2** *Content of Certification.* The certification to be submitted with each Claim must be in writing and must certify under penalty of perjury that:

- (i) The Prime Contractor has reviewed the Claim and it is filed in good faith;

- (ii) Supporting data are accurate and complete to the best of the Prime Contractor's knowledge and belief;
- (iii) The amount of the Claim accurately reflects, to the best of the Prime Contractor's knowledge and belief, the amount for which the District is liable; and
- (iv) The Prime Contractor is familiar with Government Code Sections 12650 *et seq.* and Penal Code Section 72 relating to false and fraudulent claims, and is aware that such claims may lead to substantial fines and/or imprisonment.

**4.5.4.3**      *Execution of Certification.* The Prime Contractor's authorized representative (determined as provided in Section 12 of the Instructions for Bidders) must sign the certification under penalty of perjury and have such signature notarized.

**4.5.5 Submitting the Claim.** After being prepared and certified in accordance with this Section 4.5, Claims must be delivered to the District, with copies thereof sent to the Architect and the Construction Manager, via personal delivery (signature of receiving person requested) or certified or registered U.S. Mail (postage pre-paid and signature of receiving person requested).

**4.5.6 Claims for \$375,000 or Less.** Each Claim within the scope of Public Contract Code Section 20104(b)(2) and for an amount less than or equal to \$375,000 shall be resolved in accordance with the procedures set forth in Public Contract Code Section 20104 *et seq.* ("PCC Claims Procedures"), as those may be amended from time to time, and the PCC Claims Procedures are incorporated herein by this reference. In summary, the PCC Claims Procedures specify requirements and procedures for filing a claim, for requesting additional information, and for responding to the claim, as well as for disputing the response to the claim. Different timelines and procedures apply for claims of less than \$50,000 and for claims of \$50,000 to \$375,000. In addition, the PCC Claims Procedures specify requirements for civil actions filed to resolve claims. The PCC Claims Procedures do not apply to tort claims or alter time periods for filing of tort claims in accordance with the Government Code. For additional information, the Prime Contractor shall refer to Public Contract Code Section 20104 *et seq.*

NOTHING IN THIS SUBSECTION 4.5.6 OR IN THE PCC CLAIMS PROCEDURES SHALL BE DEEMED OR CONSTRUED TO SUPERSEDE THE REQUIREMENTS OF SUBSECTIONS 4.5.2, 4.5.3, 4.5.4, OR 4.5.5 OF THESE GENERAL CONDITIONS, WHICH REMAIN APPLICABLE TO EACH AND EVERY CLAIM ARISING FROM THE WORK OR RELATING TO THE CONTRACT.

**4.5.7 Additional Information Relevant to Claim.** Except as expressly limited by the PCC Claims Procedures when those are applicable, at all times that a Claim is pending, the District, Architect or Construction Manager may request that the Prime Contractor provide additional information relevant to the Claim that the District reasonably believes is necessary or convenient for analysis or evaluation of the Claim. The Prime Contractor shall provide such additional information within fourteen (14) days of receiving the District's request, and any time

period in which the District is to respond to the Claim shall be extended by the amount of time required for the Prime Contractor to provide the requested information.

**4.5.8 Initial Review of Claim.** Except as expressly limited by the PCC Claims Procedures when those are applicable, the Architect and Construction Manager will review each Claim and take one or more of the following preliminary actions within twenty (20) days of receipt of the Claim: (i) request additional information; (ii) if necessary due to the complexity and/or number of issues, provide a schedule indicating when the Architect and Construction Manager expect to take action; (iii) recommend that the District reject the Claim in whole or in part, stating reasons for rejection; (iv) recommend that the District approve the Claim; or (v) suggest a compromise of the Claim. Regardless of whether a Claim is processed pursuant to the PCC Claims Procedures, the District may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim and request the surety's assistance in resolving the Claim. If the Architect and Construction Manager request additional information, the Prime Contractor shall provide such information in accordance with Subsection 4.5.7.

**4.5.9 Approval of Claim After Initial Review.** If the District accepts a recommendation to approve a Claim, the Architect and Construction Manager will provide notice to the Prime Contractor and will prepare or obtain and process a Change Order that appropriately documents the resolution of the Claim.

**4.5.10 Rejection of Claim After Initial Review.** If the District accepts a recommendation to reject a Claim, in whole or in part, the Architect and Construction Manager will provide notice to the Prime Contractor. If the District rejects the Claim in part only, the Architect and Construction Manager will prepare or obtain and process a Change Order that appropriately documents the partial resolution of the Claim. Subject to the provisions of Subsection 4.5.14, to the extent the District rejects a Claim, in whole or in part, without initiating informal efforts to resolve the Claim in accordance with Subsection 4.5.11, the Prime Contractor may pursue any remedy available to the Prime Contractor in accordance with the Contract.

**4.5.11 Informal Efforts to Resolve Claim.** Notwithstanding Subsection 4.5.10, in the sole discretion of the District, if the Architect and Construction Manager have recommended that the District reject a Claim, in whole or in part, the District may request that the Prime Contractor meet with the District, Architect and Construction Manager. The District also may request such meeting if the Architect and Construction Manager have suggested a compromise to a Claim. If so requested, the Prime Contractor shall so meet, and the meeting shall be held within ten (10) days of the District's request. The purpose of such meeting, in either case, will be to provide an opportunity for the parties to attempt to resolve the Claim on an informal basis. Except as expressly limited by the PCC Claims Procedures when those are applicable, if the District has requested such meeting, completion of the informal efforts to resolve the Claim shall be a condition precedent to any action, arbitration, or other legal proceeding arising from a Claim. The District and the Prime Contractor may bring to such meeting any documents or other materials related to the basis or bases for the Claim and any individual they believe necessary or convenient for purposes of the discussions. The individuals present at the meeting shall make good-faith efforts to resolve the Claim. If the District and the Prime Contractor are unable to resolve the Claim during the meeting, but agree that further informal efforts would be

productive, they may schedule additional meetings or discussions for purposes of continuing the efforts to resolve the Claim. If, not less than thirty (30) days after the initial meeting, either the District or the Prime Contractor concludes that additional informal efforts to resolve the Claim would be unavailing, it shall provide written notice to the other. In the event such written notice is given, neither the District nor the Prime Contractor shall be required to continue informal attempts to resolve the Claim.

**4.5.12 Documentation of Compromise.** If the District and Prime Contractor agree to compromise a Claim, the Architect and Construction Manager will prepare or obtain and process a Change Order that appropriately documents the resolution of the Claim.

**4.5.13 Architect Ruling if Fail to Resolve Claim.** Except as provided by the PCC Claims Procedures when those are applicable, if a Claim or portion thereof has not been resolved pursuant to Subsection 4.5.11, the Architect, in consultation with the Construction Manager, will rule on the unresolved Claim or portion thereof and provide it in writing to the District and the Prime Contractor. The Architect and Construction Manager shall issue its ruling within thirty (30) days of the notice given pursuant to Subsection 4.5.11 terminating informal efforts to resolve the Claim. The Architect's ruling shall specify its decision in regard to each basis for the Claim, as set forth in the Claim, and shall specify any change in the Contract Price and/or Contract Time. Regardless of whether issued pursuant to this Subsection or the PCC Claims Procedures, the Architect's ruling on a Claim shall be final. Subject to the provisions of Subsection 4.5.14, if the Prime Contractor disagrees with the Architect's ruling, the Prime Contractor may pursue any remedy available to the Prime Contractor in accordance with the Contract.

**4.5.14 Conditions Precedent to Further Proceedings.** Except as expressly limited by the PCC Claims Procedures when those are applicable, a rejection of a Claim, in whole or in part, pursuant to Subsection 4.5.10 or a ruling by the Architect on the Claim in accordance with Subsection 4.5.13, whichever applies, shall be required as a condition precedent to the initiation of any action, arbitration or other proceeding arising from the basis for the Claim. Such requirement applies to all matters arising from the execution and progress of the Work and/or the extent to which the Work has been completed. Notwithstanding the foregoing, such rejection or ruling shall not be a condition precedent to initiation of any such action, arbitration or other proceeding arising from the basis for the Claim if thirty (30) days has passed since the Prime Contractor provided written notice to the District, Architect and Construction Manager of, and within such thirty (30) day period they have failed to cure, any of the following occurrences: (i) the Architect and Construction Manager have failed to take any action in accordance with Subsection 4.5.8 or within any time limit specified in accordance with Subdivision (ii) of Subsection 4.5.8; (ii) the Architect and Construction Manager have failed to take any action within the extended time determined in accordance with Subsection 4.5.7; (iii) the Architect and Construction Manager have failed to take any action within an agreed time limit; (iv) the Claim relates to a stop payment notice not arising from any extra or changed work for which approval has not been provided; or (v) the District has the right and/or obligation to impose or assess remedies and/or penalties provided for by statute given the District's status as a public entity.

**4.5.15 No Right to Stop Work.** Neither the existence of any dispute, nor the initiation of any Claim or action, arbitration or other legal proceeding arising from the Claim, shall be a basis for stopping the Work, and the Prime Contractor shall promptly and diligently proceed and/or continue with all Work under the Contract or as required by the District despite the existence of any dispute or the filing of any Claim or legal proceeding, and the District shall continue to make any undisputed payments in accordance with the Contract. If a Claim is not resolved in accordance with the Contract, the Prime Contractor shall neither rescind the Contract nor stop the progress of the Work, and Prime Contractor's sole remedy shall be to initiate an action or other legal proceedings as permitted under Contract after the Project has been completed, but not before.

**4.5.16 Resolving Disputes Through Binding Arbitration.** The District and the Prime Contractor may agree to submit individual disputes or Claims to binding arbitration. The District and Prime Contractor shall agree on an arbitrator within thirty (30) days after agreeing to arbitration, but if they are unable to so agree, they shall request that the presiding judge of the Superior Court for the County of San Diego designate an arbitrator experienced in public construction. Each party to the arbitration shall pay its proportionate share of the cost of the arbitration. The arbitrator shall establish procedures and rules to be followed in conducting the arbitration, which, at a minimum, shall specify that the arbitrator shall adhere to and apply all substantive statutory, regulatory and case law that is applicable to the dispute. If a party petitions to confirm, correct, or vacate the award as provided by Chapter 4 of Title 9 of the Code of Civil Procedure (commencing with Section 1285), the prevailing party shall be entitled as part of its costs to reasonable attorneys' fees and expenses to be fixed by the Court. The surety for the Prime Contractor's performance bond and/or payment bond shall be made a party to any such arbitration and shall be fully bound by any decision of the arbitrator.

**4.5.17 Resolving Disputes in Court of Competent Jurisdiction.** If any Claim is not resolved in accordance with the procedures set forth in this Section 4.5, subject to compliance with all such procedures as required, the Claim may be submitted to a court of competent jurisdiction in the County of San Diego, for resolution through bench trial. No such action may be initiated until after the Project has been fully completed and accepted by the District, earlier completion as defined in Subsection (c) of Public Contract Code Section 7107, or termination of the Prime Contractor from the Project prior to completion; and any statutory limitation on filing of such action shall be tolled commencing with completion of all applicable procedures in accordance with this Section 4.5 and until the date an action may be filed as provided in this Subsection 4.5.17.

**4.5.18 Remedies Not Limited.** The rights and remedies available in accordance with this Contract are in addition to any rights and remedies available pursuant to applicable laws or regulations; provided that the exercise of any and all such rights and remedies are subject to procedural requirements made applicable by this Section 4.5.

## **PART 5 SUBCONTRACTORS**

### **Section 5.1    DEFINITIONS**

**5.1.1 Subcontractual Relations.** By appropriate agreement, written where legally required for validity, the Prime Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Prime Contractor by terms of the Contract Documents, and to assume toward the Prime Contractor all the same obligations and responsibilities assumed by Prime Contractor pursuant to the Contract Documents. Each subcontract agreement shall preserve and protect the rights of the District, the Construction Manager and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, the Prime Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors. The Prime Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Upon written request of the Subcontractor, the Prime Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement, which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed sub-subcontractors.

**5.1.2 Subcontractor Licenses.** All Subcontractors must be properly licensed by the Contractors State License Board prior to commencing any work on the Project.

**5.1.3 Substitution of Subcontractor.** Substitution of Subcontractors shall be permitted only with District consent and as authorized under Public Contract Code Sections 4107 *et seq.* If the substituted subcontractor requests, District will conduct a hearing on the substitution. No substitution of a Subcontractor may result in any increase in the Contract Price or result in the granting of any extension of time for the completion of the Project. If project is subject to prequalification as identified by CA AB 1565 under the Notice to Bidders (Document 00020), all Mechanical, Electrical, and Plumbing ("MEP") and General Contractor ("A/B") subcontractors must be prequalified at the time of substitution before substituting another MEP or A/B prequalified subcontractor. Subcontractor must have a DIR number.

## **PART 6**

### **CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS**

#### **Section 6.1    DISTRICT RIGHT TO PERFORM CONSTRUCTION**

##### **6.1.1    Separate Contracts.**

**6.1.1.1**        District reserves the right to let other contracts in connection with this Work. Prime Contractor shall afford other contractors reasonable opportunity for (i) introduction and storage of their materials; (ii) access to the Work; and (iii) execution of their work. Prime Contractor shall properly connect and coordinate its Work with the work of other contractors.

**6.1.1.2**        If any part of Prime Contractor's Work depends on proper execution or results of any other contractor, the contractor shall inspect and within forty-eight



(48) hours or less, report to the Construction Manager and the Architect, in writing, any defects in such work that render it unsuitable for proper execution of Prime Contractor's Work. Prime Contractor will be held accountable for damages to District for that work which it failed to inspect or should have inspected. Prime Contractor's failure to inspect and report shall constitute its acceptance of other contractors' work as fit and proper for reception of its Work, except as to defects which may develop in other contractors' work after execution of Prime Contractor's Work.

**6.1.1.3** To ensure proper execution of its subsequent Work, Prime Contractor shall measure and inspect Work already in place and shall at once report to the Construction Manager and the Architect in writing any discrepancy between executed Work as built and the Contract Documents.

**6.1.1.4** Prime Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such work on Prime Contractor's schedule.

**6.1.1.5** Nothing herein contained shall be interpreted as granting to Prime Contractor the exclusive occupancy at the Project Site. Prime Contractor shall not unreasonably hinder or delay any other contractor working on the Project Site. If performance of work by another contractor is likely to cause interference with Prime Contractor's performance of the Contract, District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether work can be coordinated so that contractors may proceed simultaneously.

**6.1.1.6** District shall not be responsible for any damages suffered or extra costs incurred by Prime Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project, or caused by any decision or omission of District respecting the order of precedence in performance of contracts.

PRIME CONTRACTOR IS AWARE THAT THE WORK MAY BE SPLIT INTO SEVERAL PHASES AND MAY RELATE TO WORK PERFORMED UNDER SEPARATE CONTRACT. IF THE CONTRACT PROVIDES THAT THE WORK IS SPLIT INTO PHASES, THEN PRIME CONTRACTOR SHALL BE DEEMED TO HAVE MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES WHICH MAY ARISE FROM COORDINATION WITH CONTRACTORS FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR, PRIME CONTRACTOR'S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR THAT CAUSED SUCH DAMAGE AND NOT THE DISTRICT. PRIME CONTRACTOR SHALL PROVIDE ACCESS FOR OTHER CONTRACTORS AS NECESSARY TO PREVENT DELAYS IN THEIR WORK.

**6.1.2 District's Right to Carry out the Work. See Section 2.2.**

**6.1.3 Designation as Prime Contractor.** If the District awards any separate contract for work on the Project Site, the term “Prime Contractor” as used in the contract documents for that separate contract shall mean the prime contractor identified under that separate contract.

**6.1.4 Prime Contractor Duties.** The Prime Contractor shall have overall responsibility to reasonably coordinate and schedule Prime Contractor’s activities with the activities of the District’s own forces and of each separate contractor with the Work of the Prime Contractor. The Prime Contractor shall participate with other separate contractors and the District in reviewing their construction schedules when directed to do so. Additionally, Prime Contractor shall coordinate with Construction Manager, Architect and Project Inspector to ensure timely and proper progress of Work. Failure to coordinate with other trade contractors and the Construction Manager shall not be grounds for time and cost related Claims.

## Section 6.2 PRESERVATION OF PROJECT SITE AND MATERIAL

The Prime Contractor shall ensure proper safety and storage of all materials, shall be responsible for the improvements, material and equipment on Project Site, and, to the extent relating to its Work, shall be responsible for the Project Site. All risk of loss or damage shall be borne by Prime Contractor during the Work until the date of Completion. The Prime Contractor shall carry adequate insurance in case of calamity and is not entitled to rely on the insurance requirements set forth in the Contract Documents as being adequate coverage in case of calamity.

## Section 6.3 DISTRICT’S RIGHT TO CLEAN UP

If a dispute arises among the Prime Contractor, separate contractors, and the District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Section 3.12, the District may clean up and allocate the cost among those it determines are responsible.

# **PART 7 CHANGES IN THE WORK**

## Section 7.1 CHANGES

**7.1.1 No Changes Without Authorization.** There shall be no change whatsoever in the Drawings and Specifications, or in the Work without an executed Change Order, Construction Change Directive, or order by the Architect for a minor change in the Work as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the Governing Board has authorized the same and the cost thereof approved in writing by Change Order or executed Construction Change Directive. The Prime Contractor must submit requests for Change Orders a sufficient amount of time in advance of need in order to avoid delay while accommodating District approval procedures. Any extension of time associated with a change in the Work must be resolved at the time of issuance, and duly adjusted in writing in, the Change Order for such change. The provisions of the Contract Documents shall apply to all

such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Part 7, all Change Orders shall be prepared and issued by the Architect and shall become effective when executed by the Governing Board, the Architect, the Prime Contractor, and, if necessary, the DSA.

Should any Change Order or Construction Change Directive result in an increase in the Contract Price, the cost of such Change Order or Construction Change Directive shall be agreed to, in writing, in advance by Prime Contractor and District and be subject to the monetary limitations set forth in Public Contract Code Section 20118.4. In the event that Prime Contractor proceeds with any change in Work without first notifying District and obtaining the Architect's and District's consent to a Construction Change Directive or a Change Order, Prime Contractor waives any Claim of additional compensation for such additional work.

PRIME CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THE FOREGOING NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CHANGE ORDER OR CONSTRUCTION CHANGE DIRECTIVE, OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY.

**7.1.2 Architect Authority.** The Architect will have authority to order minor changes in the Work not involving any adjustment in the Contract Price, extension of the Contract Time, or a change that is inconsistent with the intent of the Contract Documents. Such changes shall be effected by written Change Order and shall be binding on the District and the Prime Contractor. The Prime Contractor shall carry out such written orders promptly.

## **Section 7.2 CHANGE ORDERS**

A Change Order is a written instrument prepared by the Architect and signed by the District (as authorized by the Governing Board), the Prime Contractor, the Construction Manager, the Architect, and the DSA (if necessary), stating their agreement upon all of the following:

- (I) A description of a change in the Work;
- (ii) The amount of the adjustment in the Contract Price, if any; and
- (iii) The extent of the adjustment in the Contract Time, if any.

## **Section 7.3 CONSTRUCTION CHANGE DIRECTIVES**

**7.3.1 Definition.** A Construction Change Directive is a written order prepared by the Architect and signed by the District, the Construction Manager and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Price or Contract Time, or both. The District may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions. If applicable, the Contract Price and Contract Time will

be adjusted as provided in the Construction Change Directive. In the case of a Construction Change Directive being issued, Prime Contractor must commence Work immediately or delays from failure to perform Construction Change Directive shall be the responsibility of Prime Contractor. Any dispute as to the sum of Construction Change Directive or timing of payment shall be resolved pursuant to Section 4.5.

**7.3.2 Use to Direct Change.** The District may issue a Construction Change Directive in the absence of agreement on the terms of a Change Order.

#### Section 7.4 REQUEST FOR INTERPRETATION

**7.4.1 Definition.** A Request for Interpretation or “RFI” is a written request prepared by the Prime Contractor requesting the Architect to provide additional interpretation necessary to clarify or amplify an item that the Prime Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems that have arisen under field conditions.

**7.4.2 Scope.** The RFI shall reference all the applicable Contract Documents including Specification Section, detail, page numbers, drawing numbers, and sheet numbers, *et cetera*. The Prime Contractor shall make suggestions and interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Cost, Contract Time, or the Contract Documents.

**7.4.3 Response Time.** The Prime Contractor shall submit an RFI a sufficient amount of time in advance of need in order to avoid delay while accommodating the Architect’s approval procedures. The Architect will respond to an RFI within ten (10) days after receiving such request or within a reasonable time if due to the complexity and/or number of issues. If the Architect’s response results in a change in the Work, then such change shall be effected by a written Change Order or Construction Change Directive, if appropriate. If the Architect cannot respond to the RFI within a reasonable time, the Architect shall notify the Prime Contractor, with a copy to the Project Inspector and the District, of the amount of time that will be required to respond.

**7.4.4 Costs Incurred.** The Prime Contractor shall be responsible for any costs incurred for professional services, which shall be deducted from the next progress payment, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. District, at its sole discretion, shall invoice Prime Contractor for all such professional services arising from this Part.

#### Section 7.5 REQUEST FOR PROPOSAL

**7.5.1 Definition.** A Request for Proposal or “RFP” is a written request prepared by the Architect requesting the Prime Contractor to submit to the District, the Construction Manager and the Architect an estimate of the effect of a proposed change on the Contract Price and the Contract Time.

**7.5.2 Scope.** An RFP shall contain adequate information, including any necessary Drawings and Specifications, to enable Prime Contractor to provide the cost breakdowns

required by Section 7.7. The Prime Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

#### Section 7.6 CHANGE ORDER REQUEST

**7.6.1 Definition.** A Change Order Request is a written request prepared by the Prime Contractor requesting that the District, the Construction Manager and the Architect issue a Change Order based upon a proposed change called for in an RFP or a Claim pursuant to Section 4.5.

**7.6.2 Changes in Price.** A Change Order Request shall include breakdowns per Section 7.7 to validate any change in Contract Price due to proposed change or Claim.

**7.6.3 Changes in Time.** A Change Order Request shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project schedule. If Prime Contractor fails to request a time extension in a Change Order Request, then the Prime Contractor is thereafter precluded from requesting or claiming a delay.

#### Section 7.7 COST OF CHANGE ORDERS

**7.7.1 Scope.** Within ten (10) days after a request is made for a change that impacts the Contract Price, Contract Time or critical path, the Prime Contractor shall provide the District and the Architect with a written estimate of the effect of the proposed Change Order upon the Contract Price and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such Change Order. Changes may be made by District by an appropriate written Change Order, or, at the District's option, such changes shall be implemented immediately upon the Prime Contractor's receipt of an appropriate written Construction Change Directive.

District may, as provided by law and without affecting the validity of the Contract, order changes, modification, deletions and extra work by issuance of written Construction Change Directives from time to time during the progress of the Project, Contract Price being adjusted accordingly. All such work shall be executed under conditions of the original Agreement except that any extension of time caused thereby shall be adjusted at time of ordering such change. District has discretion to order changes on a "time and material" basis with adjustments to time made after Prime Contractor has justified through documentation the impact on the critical path of the Project.

**7.7.2 Methods For Determining Cost.** The amount of the increase or decrease in the Contract Price resulting from a Change Order, if any, shall be determined at the sole discretion of the District based on one or more of the methods specified in this Subsection 7.7.2.

**7.7.2.1** *Lump Sum Proposal.* Acceptable lump sum proposal from the Prime Contractor properly itemized and supported by sufficient substantiating data to permit

evaluation. Estimates for lump sum proposals shall be limited to direct expenditures necessitated specifically by the subject extra work and shall be segregated into categories as set forth in Article 7.7.2.3. In addition, the Prime Contractor and Subcontractor will be paid a lump sum for overhead, profit, and bond. Such lump sum shall conform to the percentages outlined in Article 7.7.2.3(v). For added or omitted work by Subcontractors, the Prime Contractor shall furnish to the District the Subcontractors' detailed estimate of the cost for labor, material, and equipment, including the markup by the Subcontractor for overhead and profit. Such estimate of cost shall be signed by the Subcontractor. The same requirement shall apply to any sub-subcontractor or material supplier.

**7.7.2.2**      *Unit Pricing.* Unit prices contained in Prime Contractor's original bid and incorporated into Contract Documents or fixed by subsequent agreement between District and Prime Contractor. Unit prices shall include all necessary labor, material, overhead, profit, and applicable taxes.

**7.7.2.3**      *Time and material.* Calculated time spent and materials used, including direct costs for labor, material, and equipment rental plus markups for overhead and profit for Prime Contractor, Subcontractor, and sub-subcontractors as applicable. The following outline shall be utilized for all time and material and lump sum proposals:

- (i) Labor: attach itemized direct hourly rates in accordance with certified payroll records times total hours expended. Separately show dollar amount for employer-paid payroll taxes/insurance benefits. Enter total as direct labor time.
- (ii) Material: attach receipts, invoices, or itemized quantity and unit costs plus tax and delivery. Enter total as material item.
- (iii) Equipment: attach receipts, invoices or tear tickets indicating unit costs and total hours or loads charged (small tools with a value of less than \$500 are to be included in markup). Enter total as equipment rental time.
- (iv) SUBTOTAL [lines (i), (ii) and (iii)]
- (v) The allowance for the combined overhead and profit included in the total cost to the District shall be based on the following:
  - (a) Ten percent (10%) combined overhead and profit, of the total estimated costs of the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the Subcontractor. This shall apply to all changes.
  - (b) All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the Subcontractor.

(c) The combined overhead and profit percentages are to include the following costs: home office overhead, off-site supervision, change order preparation, insurance, negotiation/research, time delays, project interference and disruption, additional guarantee and warranty durations, on-site supervision, additional temporary protection, additional construction facilities, additional material handling costs, additional safety equipment costs and small tools with a daily rental rate of less than \$250.00.

(vi) SUBTOTAL [lines (v) and (vi)]

(vii) PRIME CONTRACTOR'S BOND [not to exceed 1% of line (vi)]

(viii) TOTAL CHANGE ORDER REQUEST [lines (vi) and (vii)]

**7.7.3 Amount of Credit.** The amount of credit to be allowed by the Prime Contractor to the District for a deletion or change which results in a net decrease in the Contract Price shall be actual net cost, including amounts attributable to overhead, profit, bond premium, *et cetera*. When both additions and credits covering related work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

It is expressly understood that the value of such extra work or changes, as determined by any of the aforementioned methods, expressly includes any and all of the Prime Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the project or resulting from delay, disruption, acceleration, interference, hindrance, or the like to the project.

**7.7.4 Deductive Change Orders.** Deductive Change Orders must be based on deductive alternates specified in the Prime Contractor's bid or determined in accordance with Subsections 7.7.2 and 7.7.3.

**7.7.5 Discounts, Rebates, and Refunds.** For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Prime Contractor, and the Prime Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of the Prime Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein.

**7.7.6 Accounting Records.** With respect to portions of the Work performed by Change Orders and Construction Change Directives on a time-and-materials, unit-cost, or similar basis, the Prime Contractor shall keep and maintain cost-accounting records in accordance with generally-accepted standards and principles or as otherwise required by the District, which records shall be available to the District on the same terms as any other books and records the Prime Contractor is required to maintain under the Contract Documents.

**7.7.7 Disagreement on Change Order.** If the Prime Contractor and the District are unable to agree as to any adjustment in a Change Order to the Contract Price, Contract Time or other matter, the District may order the Prime Contractor to proceed with the change and the Prime Contractor shall then diligently commence and perform the changed Work. If the Prime Contractor desires to file a Claim for an increase in the Contract Price or any extension of the Contract Time, it must notify the District in accordance with Section 4.5 of these General Conditions, and no Claim will be valid unless filed in accordance with Section 4.5. The Prime Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon.

**7.7.8 Alteration to Change Order Language.** Prime Contractor shall not alter Change Orders or reserve time in Construction Change Directives. Prime Contractor shall execute finalized Change Orders and, if Prime Contractor disputes any adjustment to the Contract Price or Contract Time, may file a Claim in accordance with Section 4.5 of these General Conditions.

## **PART 8 TIME**

### **Section 8.1 DEFINITIONS**

**8.1.1 Contract Time.** Prime Contractor shall perform and complete all Work under the Contract Documents within the time period specified in the Agreement Form. Moreover, Contractor shall perform its Work in strict accordance with any completion schedule, Construction Schedule or Project milestones developed pursuant to the provisions of the Contract including, but not limited to the Project schedule set forth in the Specifications.

**8.1.2 Notice to Proceed.** District may give a Notice to Proceed at any time within two (2) months of the award of the Contract. Once Prime Contractor has received the notice to proceed, Prime Contractor shall complete the Work in the period of time referenced in the Contract Documents.

In the event that District desires to postpone the giving of the notice to proceed beyond this two (2) month period, it is expressly understood that with reasonable notice to the Prime Contractor, the giving of the date to proceed may be postponed by District. It is further expressly understood by Prime Contractor, that Prime Contractor shall not be entitled to any Claim of additional compensation as a result of the postponement of the giving of the notice to proceed

If the Prime Contractor believes that a postponement will cause a hardship to Prime Contractor, Prime Contractor may terminate the Contract with written notice to District within ten (10) days after receipt by Prime Contractor of District's notice of postponement. It is further understood by Prime Contractor that in the event that Prime Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Prime Contractor for the Work that Prime Contractor had performed at the time of notification of postponement. Should Prime 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 responsible bidder.



**8.1.3 Computation of Time.** Prime Contractor will only be allowed a time extension for unusually severe weather if it results in precipitation or other conditions which in the amount, frequency, or duration is in excess of the norm at the location and time of year in question as established by National Oceanic and Atmospheric Administration (NOAA) weather data and the Prime Contractor demonstrates that adverse weather conditions are the cause of the delay. The Prime Contractor shall allot not less than twenty-two (22) calendar days in its schedule for each winter weather period, which is defined as the months, in aggregate, of October, November, December, January, February and March. The weather days shall be shown on the schedule and if not used will become float days for the Project's use. The Prime Contractor will not be allowed a day-for-day weather delay when the Contract is bid for construction to occur during a period that normally includes inclement weather. A day-for-day extension will only be allowed for those days in excess of the norm. The Prime Contractor is expected to perform the Work seven (7) days per week (if necessary, irrespective of inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather.

If the weather is unusually severe, in excess of the NOAA data norm and prevents the Prime Contractor from beginning work at the usual daily starting time, or prevents the Prime Contractor from proceeding with seventy-five percent (75%) of the normal labor and equipment force towards completion of the day's current controlling item on the accepted schedule for a period of at least five hours, and the crew is dismissed as a result thereof, the Construction Manager and the Architect will designate such time as unavoidable delay and grant one (1) calendar-day extension.

## Section 8.2 HOURS OF WORK

**8.2.1 Sufficient Forces.** The Prime Contractor and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

**8.2.2 Performance During Working Hours.** Work shall be performed during regular working hours as permitted by the appropriate governmental agency except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the advance written consent of the District and approval of any required governmental agencies.

**8.2.3 Costs for After Hours Inspections.** If the Work is required by the Contract Documents to be done after-hours and results in the need for the Project Inspector's services outside the Project Inspector's regular working hours, the costs of any after-hour inspections shall be borne by the District. This includes school-wide testing periods.

If the District allows the Prime Contractor to do Work outside regular working hours for the Prime Contractor's convenience, the costs of any inspections required outside regular working hours shall be invoiced to the Prime Contractor by the District and deducted from the next Progress Payment.

If the Prime Contractor elects to perform Work outside the Project Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to the Prime Contractor by the District and deducted from the next Progress Payment.

### Section 8.3 PROGRESS AND COMPLETION

**8.3.1 Time of the Essence.** Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Prime Contractor confirms that the Contract Time is a reasonable period for performing the Work.

**8.3.2 No Commencement without Insurance.** The Prime Contractor shall not commence operations on the Project or elsewhere prior to the effective date of insurance and bonds required by Part 11. The date of commencement of the Work shall not be changed by the effective date of such insurance. If Prime Contractor commences Work without insurance and bonds, all Work is performed at Prime Contractor's peril and shall not be compensable until and unless Prime Contractor secures bonds and insurance pursuant to the terms of the Contract Documents and subject to District Claim for damages.

**8.3.3 Expeditious Completion.** The Prime Contractor shall proceed expeditiously with adequate forces and shall achieve Completion within the Contract Time. Notification of inadequate work forces, by the Construction Manager, will necessitate the submission of a recovery schedule.

### Section 8.4 DELAYS

**8.4.1 Work in Conformance with Schedule.** The Work shall be commenced and shall be completed in conformance with the Construction Schedule. Construction delays caused by normal seasonal rainfall are included within the total number of calendar days specified and will not be considered as a reason for an extension of time. These conditions shall be wholly at the risk of the Prime Contractor. Liquidated damages may be assessed if any individual activity duration exceeds the time indicated for that activity on the Construction Schedule.

**8.4.2 Compensable Impacts.** A "Compensable Impact" is defined as a delay, disruption, interference, hindrance and/or acceleration of the Work that is (1) unreasonable under the circumstances involved; (2) not within the contemplation of the parties at the time of contracting; and (3) which is caused by one of the parties to the Contract Documents or is caused by some other person for whom one of the parties to the Contract Documents is responsible.

**8.4.2.1 District Responsible.** If the District causes or is responsible for a Compensable Impact, then the time period for completion of the Work shall be extended by the number of calendar days that the Prime Contractor experiences the Compensable Impact, provided that satisfactory evidence is presented to the District within fifteen (15) calendar days of the commencement of the Compensable Impact and provided that the Compensable Impact is neither caused, contributed to, or continued, by the fault or negligence of the Prime

Contractor, its Subcontractors, material suppliers or others reasonably and customarily under the Prime Contractor's and/or its Subcontractors' control. A time extension granted for the Work at one site shall not apply to any other site unless the time extension expressly states that to be the case. The extension of time, if allowed by the District, shall only be authorized by, and be contained in, a written Change Order.

**8.4.2.2**        *District Not Responsible.* The District and those acting on its behalf shall not be liable for any damages because of any delay or failure to deliver the Project Site to the Prime Contractor where the cause is beyond the control of and without the fault of the District, including but not limited to: an act of God or of a public enemy; act of Government; act of any quasi-governmental or publicly-regulated entity, including a utility, act of the Prime Contractor or the Prime Contractor's employee or agent; fire; flood; epidemic; quarantine restrictions; riot; strike; freight embargo; weather; or act of any third person or entity not subject to direct control of the District. The sole remedy of the Prime Contractor for any such delay or failure to furnish the Project Site shall be limited to an extension of time.

**8.4.2.3**        *Hazardous Materials.* In anticipation of, and in compliance with, Public Contract Code Section 7102, the parties acknowledge that certain site, and/or existing site improvements, conditions regarding any hazardous substance, including without limitation, asbestos and lead, may exist or be discovered during the project which may cause a delay, disruption, interruption, hindrance, and/or interference of the Work. Regarding contracts involving Work on existing structures, the Prime Contractor expressly acknowledges that it shall not be entitled to payment of liquidated or other damages by the District for a delay, disruption, interruption, hindrance, and/or interference of the Work of up to ninety (90) calendar days whenever such time is required in order to abate or remove from such structure(s) any hazardous material such as, but without limitation, asbestos or lead discovered at and/or in such sites. Further, Prime Contractor acknowledges and agrees that liquidated or other damages shall not be paid by the District for delays, disruptions, interruptions, hindrances, and/or interferences of the Work up to an including an additional ninety (90) calendar days, whenever such time is required to remove underground tanks, sumps, clarifiers, hoist cylinders, and/or other underground utilities existing at the Project Site.

**8.4.2.4**        *Liquidated Damages.* In anticipation of, and in compliance with, Public Contract Code Section 7102, and because it is agreed by the Prime Contractor and the District that actual damages are impracticable and extremely difficult to ascertain regarding consequential damages caused by Compensable Impacts, the Prime Contractor and the District each hereby establish the liquidated sum, as stated in the Special Conditions, per calendar day for each day of Compensable Impact that the other can prove to be caused by and/or the responsibility of the other. The parties expressly agree to be limited solely to these liquidated damages for all Compensable Impacts as defined in this Subsection 8.4.1, but also expressly agree that no party shall be entitled to recover liquidated or actual consequential damages that are caused by concurrent Compensable Impacts. The liquidated damage amount is agreed to be fair and reasonable compensation to each of the parties, even if the amount may not fully compensate the affected party. Prime Contractor is to refer to Section 01310 Construction Schedule for the duration of individual activities contained within the overall calendar day project requirement. Liquidated damages may be assessed by the District if any individual activity

duration exceeds the time indicated for that activity on the Construction Schedule. In the event any liquidated damages are not paid by the Prime Contractor, the Prime Contractor agrees that the District may deduct such amounts from any money due or to become due to the Prime Contractor under the Contract Documents. Nothing in this Subsection 8.4.1 alters, impairs, precludes, modifies and/or changes the Prime Contractor's or the District's ability to recover additional costs incurred if expressly provided for elsewhere in the Contract Documents. Nothing in this Subsection 8.4.1 alters, impairs, precludes, modifies and/or changes the Prime Contractor's obligation to include all costs, both direct and indirect, into a Change Order Proposal and/or Change Order, pursuant to the Contract Documents.

**8.4.2.5 Change Order Work.** The Prime Contractor expressly acknowledges and agrees that Change Order work performed under the Contract Documents shall not be deemed to constitute a Compensable Impact to the Work or form the basis for claiming additional compensation based on theories including, but not limited to, acceleration, suspension, delay, or disruption to the project, and further acknowledges that a complete system of compensation for said Change Order work is provided for exclusively under the provisions of the Contract Documents pertaining to Change Order work.

**8.4.3 Excusable Delay.** The Prime Contractor shall not be charged for liquidated damages because of any delays in completion of Work that are not the fault or negligence of Prime Contractor or its Subcontractors, including acts of God, as defined in Public Contract Code Section 7105(b)(2), acts of enemy, epidemics and quarantine restrictions. Prime Contractor shall within five (5) calendar days of beginning of any such delay notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected.

No extended overhead, general conditions costs, impact costs, out-of-sequence costs or any other type of compensation, by any name or characterization, shall be paid to the Prime Contractor for any delay to any activity not designated as a critical path item on the latest approved Project schedule.

The Prime Contractor shall notify the Construction Manager and the Architect in writing of any anticipated delay and its cause, in order that the Construction Manager or the Architect may take immediate steps to prevent, if possible, the occurrence or continuance of delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

In the event the Prime Contractor requests an extension of Contract Time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work. When requesting time, i.e., extensions, for proposed Construction Change Directives, Prime Contractor must submit full justification and documentation with the proposed Construction Change Directive. If the Prime Contractor fails to submit justification with the proposed Construction Change Directive it waives its right to a time extension at a later

date. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of Work. The justification must include, but is not limited to, the following information:

- (i) The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, *et cetera*) required to perform these activities within the stated duration.
- (ii) Logical ties to the official Construction Schedule for the proposed changes and/or delay showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay. (A fragment of any delay of over ten (10) days must be provided.)

The Prime Contractor and District understand and expressly agree that insofar as Public Contract Code Section 7102 may apply to changes in the Work or delays under the Contract, the actual delays and damages, if any, and time extensions are intended to, and shall provide, the exclusive and full method of compensation for changes in the Work and construction delays.

**8.4.4 Notice of Delay Required.** The Prime Contractor shall within five (5) calendar days of the beginning of any such delay notify the District in writing of causes of the delay with justification and supporting documentation. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected. The sole remedy of Prime Contractor for extensions of time under Section 8.4 shall be an extension of the Contract Time at no cost to the District unless the delay is a Compensable Impact for which the District is responsible. Claims relating to time extensions shall be filed in accordance with applicable provisions of Section 4.5.

**8.4.5 No Compensation for Delays within Prime Contractor's Control.** Prime Contractor is aware that governmental agencies, such as the Department of General Services, gas companies, electrical utility companies, water districts and other agencies may have to approve Prime Contractor-prepared drawings or approve a proposed installation. Prime Contractor shall be deemed to have considered all possible delays and damages that might arise from any such approvals when submitting its bid for the Project. Thus, Prime Contractor is not entitled to file any Claim with the District for damages or delays arising from the delays caused by such agencies. Furthermore, the Prime Contractor has scheduled for such delays and is not entitled to an extension of time for delays caused by governmental agencies which Prime Contractor must obtain approvals from and, thus, Prime Contractor is not entitled to an extension of time.

PRIME CONTRACTOR SHALL ONLY BE ENTITLED TO COMPENSATION FOR DELAYS WHEN THE FOLLOWING CONDITIONS ARE MET: (1) THE DISTRICT IS RESPONSIBLE FOR THE DELAY; (2) THE DELAY IS UNREASONABLE UNDER THE CIRCUMSTANCES INVOLVED; AND (3) THE DELAY WAS NOT WITHIN THE CONTEMPLATION OF DISTRICT AND PRIME CONTRACTOR.

## **PART 9 PAYMENTS AND COMPLETION**

### **Section 9.1    CONTRACT PRICE**

The Contract Price is stated in the Agreement and, including authorized adjustments, is the total amount payable by the District to the Prime Contractor for performance of the Work under the Contract Documents.

### **Section 9.2    COST BREAKDOWN**

**9.2.1 Required Information.** On forms or software programs (e.g., Microsoft Project, Prolog, Expedition or Primavera) approved by the District, the Prime Contractor shall furnish the following:

- (i) Within ten (10) days of the award of the Contract, a detailed breakdown of the Contract Price (hereinafter "Schedule of Values") for the Project and Project Site;
- (ii) Within ten (10) days of the award of the Contract, the name, address, telephone number, facsimile number, California contractor license number, classification and monetary value of all subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

**9.2.2 Approval Required.** The Construction Manager and the Architect shall review all submissions received pursuant to Subsection 9.2.1 in a timely manner. The Construction Manager and the Architect must approve all submissions.

### **Section 9.3    PROGRESS PAYMENTS**

**9.3.1 Payments to Prime Contractor.** Within thirty (30) days after approval of an undisputed and properly submitted application for payment by the Prime Contractor ("Application for Payment") completed in accordance with the Schedule of Values, Prime Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as certified by Construction Manager, Architect and Project Inspector and verified by Prime Contractor) up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be Prime Contractor's best estimate. No inaccuracy or error in said estimate shall operate to release the Prime Contractor, or any surety upon any bond, from damages arising from such Work, or from the District's enforcement of each and every provision of the Contract Documents, and the District shall have the right subsequently to correct any error made in any estimate for payment.

The Prime Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

Notwithstanding anything to the contrary stated above, the Prime Contractor may include in its Application for Payment the value of any structural Steele, mail order materials, G.F.R.C. panels and other such custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

- (i) The aggregate cost of materials stored off-site shall not exceed Twenty-Five Thousand Dollars (\$25,000) at any time without the written approval of the District to be given or withheld in the District's sole discretion;
- (ii) Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, without limitation, recorded financing statements, UCC filings and UCC searches;
- (iii) With each Application for Payment, the Prime Contractor shall submit to the District a written list identifying each location where materials are stored off-site (which must be a bonded warehouse) and the value of the materials at each location. The Prime Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof;
- (iv) The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;
- (v) Representatives of the District shall have the right to make inspections of the storage areas at any time; and
- (vi) Such materials shall be (1) protected from diversion, destruction, theft and damage to the reasonable satisfaction of the District; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

**9.3.2 Purchase of Materials and Equipment.** The Prime Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays.

**9.3.3 No Waiver.** No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Notwithstanding any payment, the District may enforce each and every provision of the Contract Documents. The District may correct any error subsequent to any payment.

**9.3.4 Issuance of Certificate of Payment.** The Architect shall, within seven (7) days after receipt of an Application for Payment, either approve such payment or notify the Prime Contractor in writing of the Architect's reasons for withholding approval in whole or in part as provided in Section 9.6. The review of an Application for Payment by the Architect shall be based on the Architect's observations at the Project Site and the data comprising the

Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents, (2) results of subsequent tests and inspections, (3) minor deviations from the Contract Documents correctable prior to completion, and (4) specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Prime Contractor is entitled to payment in the amount certified.

#### Section 9.4 APPLICATIONS FOR PROGRESS PAYMENTS

##### 9.4.1 **Procedure.**

**9.4.1.1** *Progress Payment Review Meeting.* Prior to submitting any Progress Payment Request and for the purpose of expediting the Progress Payment procedure, Prime Contractor shall meet with the District's Project Inspector and Construction Manager to review and discuss each proposed Progress Payment Request. District, Architect or Construction Manager has the discretion to require from Prime Contractor any of the following information with the Application for Payment:

- (i) Certified payroll covering the period of the previous Application for Payment;
- (ii) Unconditional waivers and releases from all Subcontractor/suppliers for which payment was requested under the previous Application for Payment; or
- (iii) Material invoices, evidence of equipment purchases, rentals and other support and details of costs.

**9.4.1.2** *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Prime Contractor shall submit to the Construction Manager and the Architect an itemized Application for Progress Payment for operations completed in accordance with the Schedule of Values. Should the Project involve multiple school sites, the Prime Contractor shall prepare a separate Progress Payment request for each school site. Such application(s) shall be notarized, if required, and supported by the following or such portion thereof as Architect requires:

- (i) The amount paid as of the date of the Application to the Prime Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
- (ii) The amount being requested under the Application for Payment by the Prime Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;



- (iii) The balance that will be due to each of such entities after said payment is made;
- (iv) A certification that the Record Drawings and Annotated Specifications are current;
- (v) Itemized breakdown of Work done for the purpose of requesting partial payment;
- (vi) The additions to and subtractions from the Contract Price and Contract Time;
- (vii) A summary of the retentions held;
- (viii) Material invoices, evidence of equipment purchases, rentals, releases and other support and details of cost as the District may require from time to time;
- (ix) The percentage of completion of the Prime Contractor's Work by line item; and
- (x) An updated Schedule of Values from the preceding Application for Payment.

**9.4.1.3** The District's Project Inspector shall sign the proposed Progress Payment Request as having reviewed the same. If any item submitted for payment is disputed during this review, Prime Contractor shall use its best efforts to resolve the disputed items with District's Project Inspector, Architect and Construction Manager before submitting the Progress Payment Request to Construction Manager. The Architect, District and Construction Manager specifically reserve the right to dispute any item submitted in Prime Contractor's Progress Payment Request regardless of whether an item was identified as disputed in the review process provided for herein.

**9.4.1.4** The billing process outlined in this Section shall supersede any other billing procedures contained in the Project Specifications. Based on billing percentages approved by the Architect and Project Inspector, the Prime Contractor billings will be generated by the Construction Manager's main office and faxed to the Prime Contractor. Upon receipt, the Prime Contractor is required to make five (5) copies of the billing, SITE sign all copies as indicated, and return the billings to the Construction Manager within three (3) days of the date received for further processing. Billings must be returned to the Construction Manager's office within the specified time frame. It is strongly recommended that Prime Contractor use one of the following delivery methods:

- (i) Hand delivery.
- (ii) Express mail (overnight) to street address.

- (iii) U.P.S. next day service.
- (iv) Federal Express next day service.

**9.4.1.5** The District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Prime Contractor and Subcontractors and/or material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and any Subcontractor or sub-subcontractor, any obligation of the District to such party or right of such party against the District.

**9.4.1.6** Prime Contractor shall update record Drawings as required and failure to accomplish this will be grounds for delaying approval of Prime Contractor's Progress Payment Request.

#### **9.4.2 Prerequisites for Progress Payments.**

**9.4.2.1** *First Payment Request.* The following items, if applicable, must be completed before the first payment request will be accepted for processing:

Receipt by Architect of submittals due per Submittal Log by the date of Payment Request;

- (i) Submission of documents listed in Section 9.2 relating to Cost Breakdown;
- (ii) Submission and approval of Construction Schedule;
- (iii) List of all Subcontractors, with names, license numbers, telephone numbers, and scope of Work;
- (iv) All bonds and insurance endorsements; and
- (v) Subcontractor bonds, if required.

**9.4.2.2** *No Waiver Based on Payment.* Any payments made to Prime Contractor where criteria set forth in Article 9.4.2.1 have not been met shall not constitute a waiver of said criteria by District. Instead, such payment shall be construed as a good faith effort by District to resolve differences so Prime Contractor may pay its Subcontractors and suppliers, and any failure by the Prime Contractor to submit such items will constitute a breach of the Contract by Prime Contractor and may subject Prime Contractor to termination or other remedies under the Contract.

**9.4.2.3**      *Civil Code Sections 8132-8138 Waiver and Release.* As a condition precedent to payment of any progress payment due to the Prime Contractor, including the final payment, the Prime Contractor shall submit to the District:

(i) Duly executed conditional lien releases and waivers (in the form provided in Civil Code Sections 8132 [progress payment] and 8136 [final payment]) from the Prime Contractor and all Subcontractors and materials suppliers providing labor, services, materials or equipment in connection with the Work, whereby such entities or persons conditionally waive all lien and stop payment notice rights against the District, the Project and the Project Premises with respect to all payments to be made to them from such payment; and

(ii) Duly executed unconditional lien releases and waivers (in the form provided in Civil Code Sections 8134 [progress payment] and 8138 [final payment]) from Prime Contractor and all Subcontractors and materials suppliers providing labor, services, materials or equipment in connection with the Work, whereby such entities or persons unconditionally and irrevocably waive all lien and stop payment notice rights against the District, the Project and the Project Premises with respect to all payments made pursuant to previous applications for payment, to the extent not already covered by an unconditional release and waiver.

#### Section 9.5    WARRANTY OF TITLE

The Prime Contractor warrants title to all Work, including, without limitation, all materials and equipment. The Prime Contractor further warrants that all Work shall be free and clear of liens, claims, security interests, or encumbrances in favor of the Prime Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work. Failure to keep Work free of liens, claims, security interests or encumbrances is grounds to make a claim against Prime Contractor's payment and performance bond to immediately remedy and defend.

If a lien or stop payment notice of any nature should at any time be filed against the Work or any District property, by any entity which has supplied material or services at Prime Contractor's request, the Prime Contractor and its Surety shall promptly, on demand by District and at Prime Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or stop payment notice to be released or discharged immediately therefrom.

The District will hold funds immediately upon validation of the Stop Payment Notice until either a Release of Stop Payment Notice or a Release Bond is received. If the Prime Contractor believes the Stop Payment Notice was filed in error or is not valid, then Prime Contractor may file a Contractor's Affidavit with the District. If none of these remedies are sought, the District will withhold the funds until they are released by court action or if the subcontractor does not follow through with a suit, or not less than ten (10) days after the filing of the Stop Notice; and not more than ninety (90) days after the expiration of the period within which Stop Notices may be filed and to provide for the District's reasonable cost of any litigation pursuant to the stop payment notice.

## Section 9.6 DECISIONS TO WITHHOLD PAYMENT

**9.6.1 Reasons to Withhold Payment.** The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required by Section 9.4 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

- (i) Defective Work not remedied;
- (ii) Stop Payment Notices served upon the District;
- (iii) Liquidated damages assessed against the Prime Contractor;
- (iv) The cost of completion of the Contract if there exists reasonable doubt that the Work can be completed for the unpaid balance of any Contract Price or by the completion date;
- (v) Damage to the District or other Prime Contractor;
- (vi) Unsatisfactory prosecution of the Work by the Prime Contractor;
- (vii) Failure to store and properly secure materials;
- (viii) Failure of the Prime Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed Construction Change Directives, and verified reports;
- (ix) Failure of the Prime Contractor to maintain record Drawings;
- (x) Erroneous estimates by the Prime Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- (xi) Unauthorized deviations from the Contract Documents;
- (xii) Failure of the Prime Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates;
- (xiii) Failure to properly pay prevailing wages as defined in Labor Code Section 1720 *et seq.*;
- (xiv) Failure to properly maintain or clean up the Project Site;
- (xv) Payments to indemnify, defend, or hold harmless the District;

(xvi) Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits;

(xvii) Failure to pay Subcontractor or suppliers as required by Subsection 9.8.1; or

(xviii) Failure to provide Subcontractor/supplier releases when requested.

**9.6.2 Reallocation of Withheld Amounts.** District may, in its discretion, apply any withheld amount to payment of outstanding claims or obligations as defined in Subsections 9.5 and 9.6.1. In so doing, District shall make such payments on behalf of Prime Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Prime Contractor and District shall not be liable to Prime Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Prime Contractor an accounting of such funds disbursed on behalf of Prime Contractor.

If Prime Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, forty-eight (48) hours after providing written notice to the Prime Contractor, and without prejudice to any other remedy, the District may make good such deficiencies. The District shall adjust the total Contract Price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work which is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of at least 150% of the estimated reasonable value of the nonconforming Work) shall be made therefor.

**9.6.3 Payment After Cure.** When the grounds for declining to approve payment are eliminated or otherwise resolved, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Prime Contractor to perform in accordance with the terms and conditions of the Contract Documents.

## Section 9.7 NON-CONFORMING WORK

Prime Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract whether incorporated or not. Prime Contractor shall promptly replace and re-execute its own Work to comply with the Contract without additional expense to District and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If Prime Contractor does not remove such Work which has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove it and may store the material at Prime Contractor's expense. If Prime Contractor does not pay expenses of such removal within ten (10) calendar days' time thereafter, District may, upon ten (10) calendar days' written notice, sell such materials at auction or at private sale

and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Prime Contractor.

#### Section 9.8 SUBCONTRACTOR PAYMENTS

**9.8.1 Payments to Subcontractors.** No later than ten (10) days after receipt, or pursuant to Business and Professions Code Section 7108.5 and Public Contract Code Section 7107, the Prime Contractor shall pay to each Subcontractor, out of the amount paid to the Prime Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Prime Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to sub-subcontractors in a similar manner.

**9.8.2 No Obligation of District for Subcontractor Payment.** The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

**9.8.3 Payment Not Constituting Approval or Acceptance.** An approved Application for Payment, a progress payment, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work not in accordance with the Contract Documents.

**9.8.4 Joint Checks.** District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Prime Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District.

#### Section 9.9 CLOSE-OUT REQUIREMENTS

**9.9.1 Punch-List Procedures.** When the Prime Contractor considers the Work substantially complete, the Prime Contractor shall prepare and submit to the District a comprehensive list of minor or other items to be completed or corrected (hereinafter "Punch-List"). The Prime Contractor and its Subcontractors shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Prime Contractor to complete all Work in accordance with the Contract Documents.

Upon receipt of the Prime Contractor's punch-list, and not before, the Construction Manager, the Architect and the Project Inspector will inspect the Work to determine whether it or any designated portion of it is complete. If the inspection discloses any item, whether or not included on the Prime Contractor's punch-list, is not completed in accordance with the requirements of the Contract Documents, the Prime Contractor shall, before District's issuance of the Notice of Completion, complete or correct such item. The Prime Contractor shall then submit a request for an additional inspection by the District to determine Completion. When the Work or designated portion thereof is complete, the District will file a Notice of Completion.

Warranties required by the Contract Documents shall commence on the date of Completion of the Work, or designated portion thereof, unless otherwise provided in the Notice of Completion.

**9.9.2 Utility Connection Requirements.** Buildings shall be connected to water, gas, sewer, and electric services, complete, tested and ready for use. Service connections shall be made and existing services reconnected.

**9.9.3 Record Drawings.**

**9.9.3.1** The intent of this procedure is to obtain an exact “as-built” record of the Work upon completion of the Project. The following information shall be carefully and correctly drawn on the prints and all items shall be accurately located and dimensioned from finished surfaces of building walls on all record Drawings:

- (i) any Work not installed as originally indicated on Drawings; and
- (ii) the exact location and elevations of all covered utilities, including valves, cleanouts, *et cetera*.

**9.9.3.2** Prime Contractor is liable and responsible for inaccuracies in as-built Drawings, even though those may become evident at some future date.

**9.9.3.3** Upon completion of the Work and as a condition precedent to approval of final payment, Contractor shall obtain the Project Inspector’s acceptance of the corrected plans and specifications and provide the certification required by General Conditions section 3.10.3.4.

- (i) Corrections shall be made in black, blue or red ink on a set of approved plans and specifications. Answers to RFI’s that affect the approved plans or specifications shall be posted on the affected sheet. Plans and sketches that have been approved by field directive, Construction Change Directive, Change Order, Deferred Submittal or outside agency permit (public utilities, street improvements) shall be posted on the affected sheet or, where entire sheets have been replaced, the new sheet shall be collated into the set. Approved shop drawings shall be added to the record set and shall be appropriately added to the table of contents. Where it is impractical to post the change on the affected sheet, the change documents may be added to the record set by reference both on the affected sheet and by adding the change documents to the table of contents for the set. When referencing a sheet or document that has been added to the approved set, the area affected by the change shall be clouded on the original approved document. Any change documents with sheets that are smaller than the standard sheet size of the approved plans shall be copied onto a standard size sheet prior to scanning.
- (ii) Once the record set of approved plans and specifications is complete and accepted by the Project Inspector and the Architect, the Contractor shall have the

entire set of approved, corrected plans electronically scanned in color, each sheet its own .pdf file and named in accordance with the sheet name and number and filed in the order of the Table of Contents on a compact DVD. Provide a Table of Contents .pdf file with active links to each file on the disk. Disks and jackets must be clearly labeled with the project name and general contents. Upon completion of this task, deliver the DVD to the Architect for review and approval of the accurate compilation of the approved plans. The Contractor shall use the approved DVD to then reproduce three black and white bond copies of the entire set, (one for the school site, one for M&O and one for the Bond Program record). These three sets shall be bound with screw post fasteners using a strip of chip board both front and back as a binding and clear plastic protector sheets at the front and back of each set.

(iii) The approved corrected specifications shall be electronically scanned, each section its own .pdf file and named in accordance with the section name and number and filed in the order of the Table of Contents on a compact DVD. Provide a Table of Contents .pdf file with active links to each file on the disk. Upon completion of this task, deliver the DVD to the Architect for review and approval of the accurate compilation of the approved specifications. The Contractor shall use the approved DVD to then reproduce three black and white bond copies of the entire specification book (one for the school site, one for M&O and one for the Bond Program record). These three sets shall be bound with heavy duty three ring binders labeled with the project name on the spine.

(iv) The Contractor shall provide five copies of the two approved DVDs, (one for the school site (to be delivered to the Manager of School Facilities), one for M&O (to be delivered to the M&O front office), one for the Bond office Record (to be delivered to the Project Manager), one for the Architect and one for the Construction Manager. Contractor is to obtain hand receipts from each party and submit them to the CM.

(v) Each Operations & Maintenance Manual binder shall include plastic sleeves to receive the DVDs of the plans and specifications.

(vi) All Prime Contractors shall provide the following closeout documentation in addition to other required documents referenced in the General Conditions and Project Specifications:

1. (3) Complete sets of all applicable warranties; to be originals with wet signatures. Warranties shall be bound in a three-ring Warranty binder appropriately labeled on the spine and the face and including a table of contents.
2. (3) CD's containing all approved submittals; to be scanned in color.
3. (3) Complete sets of operation and maintenance manuals; to be properly bound, itemized/divided. Operation and maintenance manuals



shall be bound in a three-ring O&M binder appropriately labeled on the spine and the face and including a table of contents.

**9.9.4 Maintenance Manuals.** At least thirty (30) days prior to final inspection, three (3) copies of complete operations and maintenance manuals, repair parts lists, service instructions for all electrical and mechanical equipment, and equipment warranties shall be submitted. All installation, operating, and maintenance information and drawings shall be bound in 8-1/2" X 11" white binders, indexed with tabs and preceded by a table of contents. Each manual shall contain a list of Subcontractors, with their addresses and the names of persons to contact in case of emergency. Identifying labels shall provide names of manufacturers, their addresses, ratings, and capacities of equipment and machinery.

#### **9.9.5 Inspection Requirements.**

**9.9.5.1** Before calling for final inspection, Prime Contractor shall determine that the following Work has been performed:

- (i) The Work has been completed. Prime Contractor shall have performed its own punch-list and completed said rework.
- (ii) All life safety items are completed and in working order.
- (iii) Mechanical and electrical Work complete, fixtures in place, connected and ready for tryout and test. All commissioning and test and balance has been completed and reports submitted.
- (iv) Electrical circuits scheduled in panels and disconnect switches labeled.
- (v) Painting and special finishes completed.
- (vi) Doors complete with hardware, cleaned of protective film, relieved of sticking or binding, and in working order.
- (vii) Tops and bottoms of doors sealed.
- (viii) Floors waxed and polished as specified.
- (ix) Broken glass replaced and glass cleaned.
- (x) Grounds cleared of Prime Contractor's equipment, raked clean of debris, and trash removed from Project Site.
- (xi) Work cleaned, free of stains, scratches, and other foreign matter, replacement of damaged and broken material.

(xii) Finished and decorative Work shall have marks, dirt and superfluous labels removed.

(xiii) Final cleanup, as in Section 3.12.

**9.9.5.2** Furnish a letter to District stating that a responsible representative of District (specify name and position of such person) has been instructed in working characteristics of mechanical and electrical equipment.

**9.9.6 Costs of Multiple Inspections.** More than two (2) requests of the District to make inspections required under Section 13.5 shall be considered an additional service of the Construction Manager and the Architect, and all subsequent costs will be invoiced to Prime Contractor and if funds are available, withheld from remaining payments.

#### Section 9.10 PARTIAL OCCUPANCY OR USE

**9.10.1 District's Rights.** The District may occupy or use any completed or partially completed portion of the Work at any stage. The District and the Prime Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. If District and Prime Contractor cannot agree as to responsibilities such disagreement shall be resolved pursuant to Subsection 4.5.1. When the Prime Contractor considers a portion complete, the Prime Contractor shall prepare and submit a punch-list to the District as provided under Subsection 9.9.1.

**9.10.2 Inspection Prior to Occupancy or Use.** Immediately prior to such partial occupancy or use, the District, the Prime Contractor, the Construction Manager and the Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

**9.10.3 No Waiver.** Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of the Work not complying with the requirements of the Contract Documents.

#### Section 9.11 COMPLETION AND FINAL PAYMENT

**9.11.1 Final Inspection.** Prime Contractor shall comply with punch-list procedures under Subsection 9.9.1, and maintain the presence of Project superintendent and Project manager until the punch-list is complete to ensure proper and timely completion of the punch-list. Under no circumstances shall Prime Contractor demobilize its forces prior to completion of the punch-list. Upon receipt of Prime Contractor's written notice that all of the punch-list items have been fully completed and the Work is ready for final inspection and acceptance, Construction Manager and Architect shall inspect the Work and shall submit to Prime Contractor and District a final inspection report noting the Work, if any, required in order to complete in

accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the punch-list items not yet satisfactorily completed.

Upon completion of the Work contained in the final inspection report, the Prime Contractor shall notify the District, Construction Manager and Architect, who shall again inspect such Work. If the Construction Manager, the Architect and the District finds the Work contained in such final inspection report acceptable under the Contract Documents and, therefore, the Work fully completed, and if the Architect and the Construction Manager deem the requirements of Subsection 4.2.7 to be complete, it shall notify Prime Contractor, who shall then submit to the Architect its final Application for Payment.

Upon receipt and approval of such final Application for Payment, the Architect shall issue a final Certificate of Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and the Prime Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Prime Contractor as fully complete (which, absent unusual circumstances, will occur when the punch-list items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Prime Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

**9.11.2 Retainage.** The retainage, less any amounts disputed by the District or which the District has the right to withhold Pursuant to Section 9.6, shall be paid after approval of the District by the Architect's Certificate of Payment, after the satisfaction of the conditions set forth in Part 9, or up to sixty (60) days after the acceptance of the Work, occupancy of the facility or recording of the Notice of Completion by District. No interest shall be paid on any retainage, or on any amounts withheld due to a failure of the Prime Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any Escrow Agreement between the District and the Prime Contractor pursuant to Public Contract Code Section 22300.

#### **9.11.3 Procedures for Application for Final Payment.**

**9.11.3.1** *Prerequisites for Final Payment.* The following conditions must be fulfilled prior to Final Payment:

- (i) The Prime Contractor shall have made all corrections to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.

- (ii) Each Prime Contractor shall have delivered to the District all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.
- (iii) Prime Contractor must have completed all requirements set forth in Section 9.9.
- (iv) Architect shall have issued a Final Certificate of Payment.
- (v) The Prime Contractor shall have provided all waivers and releases as required pursuant to Article 9.4.2.3.
- (vi) The Prime Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.

#### Section 9.12 SUBSTITUTION OF SECURITIES

The District will permit the substitution of securities in accordance with the provisions of Public Contract Code Section 22300.

### **PART 10 PROTECTION OF PERSONS AND PROPERTY**

#### Section 10.1 SAFETY PRECAUTIONS AND PROGRAMS

**10.1.1 Prime Contractor Responsibility.** The Prime Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of the Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the District. All Work shall be solely at the Prime Contractor's risk, with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code Section 7105(b)(2).

Prime Contractor shall take, and require Subcontractors to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, State of California, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, State of California, and local codes, Prime Contractor shall furnish, erect and properly maintain at all times, as directed by District or required by conditions and progress of Work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction. Prime Contractor shall designate a responsible member of its organization on the Work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under

OSHA and Cal-OSHA regulations, to comply with reporting and other occupational safety regulations and requirements, and to protect the life, safety and health of workers. The name and position of the person so designated shall be reported to District by Prime Contractor. Prime Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the OSHA or Cal-OSHA, such violation shall be corrected promptly.

**10.1.2 Subcontractor Responsibility.** Prime Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by the Prime Contractor for the Project, which will cover all Work performed by the Prime Contractor and its Subcontractors. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

**10.1.3 Cooperation.** All Subcontractors and material or equipment suppliers shall cooperate fully with Prime Contractor, the District, and all insurance carriers and loss prevention engineers.

**10.1.4 Accident Reports.** The Prime Contractor shall require that its Subcontractors report in writing to the Prime Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Project Site, resulting in any death, personal injury, or property damage. In addition, the Prime Contractor shall require that, if the accident results in death, serious injuries, or substantial damages, the Subcontractor shall report the accident to the Prime Contractor immediately after the accident by telephone, and the Prime Contractor shall then report the accident to the Construction Manager by telephone immediately after being informed of the accident. The Prime Contractor shall report all accidents, including any for which telephonic notice has been given, in writing to the Construction Manager within two (2) days of the accident. Each written accident report shall provide all relevant facts related to the occurrence, weather information, lists of witnesses, witness statements, *et cetera*.

**10.1.5 First-Aid Supplies at Project Site.** The Prime Contractor will provide and maintain at the Project Site first-aid supplies which comply with the current OSHA and Cal-OSHA regulations.

**10.1.6 Material Safety Data Sheets and Compliance with Proposition 65.** Prime Contractor is required to have material safety data sheets available in a readily accessible place at the Project Site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know" law. The Prime Contractor is also required to properly label any substance brought onto the Project Site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

Prime Contractor is required to comply with the provisions of California Health and Safety Code Section 25249.5 *et seq.*, which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. The Prime Contractor shall familiarize itself with the provisions of this Section and shall comply fully with its requirements.

**10.1.7 Non-Utilization of Asbestos Material.** NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and actinolite.

Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material.

All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and such Work must be removed at no additional cost to the District.

Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency (EPA).

The asbestos removal Prime Contractor shall be an EPA-accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the asbestos consultant, which shall have sole discretion and final determination in this matter.

The asbestos consultant shall be chosen and approved by the District, which shall have sole discretion and final determination in this matter.

The Work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.

Interface of Work under the Contract Documents with work containing asbestos shall be executed by the Prime Contractor at its risk and at its discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of the Agreement, the Prime Contractor acknowledges the above and shall hold harmless District and its assigns for all asbestos liability that may be associated with the Work and shall instruct its employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

## Section 10.2 SAFETY OF PERSONS AND PROPERTY

**10.2.1 The Prime Contractor.** The Prime Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- (i) Employees on the Work and other persons who may be affected thereby;
- (ii) The Work, material, and equipment to be incorporated therein, whether in storage on or off the Project Site, under the care, custody, or control of the Prime Contractor, its Subcontractors or they're sub-subcontractors; and
- (iii) Other property at the Project Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

**10.2.2 Prime Contractor Notices.** The Prime Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

**10.2.3 Safety Barriers and Safeguards.** The Prime Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities. The Prime Contractor shall also as necessary relocate such safety barriers to maintain a safe path of travel for staff and students. Prime Contractor shall also provide maps showing such relocations and timing of them. Upon Written notice of deficiencies in safety barriers, Prime Contractor shall immediately remedy such a hazard. The District shall have the right to remedy such a hazard within forty-eight (48) hours of written notice to the Prime Contractor and forward a deductive change order for the cost of the remedy.

**10.2.4 Use or Storage of Hazardous Material.** When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Prime Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Prime Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored or used on the Project Site. Location of storage shall be coordinated with the District and local fire authorities.

**10.2.5 Protection of Work.** The Prime Contractor and Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The Prime Contractor and Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to or caused by agents or employees of the District.

The Prime Contractor, at its expense, will remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work.

Prime Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Prime Contractor.

**10.2.6 Requirements for Existing Sites.** Prime Contractor shall (unless waived by the District in writing):

- (i) When performing construction on existing sites, become informed and take into specific account the maturity of the students on the Project Site; and perform Work which may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange Work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. The Prime Contractor shall comply with Specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with District and school functions. The Prime Contractor shall be responsible for all directional and safety signage.
- (ii) Provide substantial barricades around any shrubs or trees indicated to be preserved.
- (iii) Deliver materials to building area over the route designated by Construction Manager.
- (iv) Take preventive measures to eliminate objectionable dust, noise, or other disturbances.
- (v) Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Construction Manager; and not interfere with the Work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and Construction Manager regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on the Project Site.
- (vi) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Prime Contractor.
- (vii) Provide District with Prime Contractor's written safety program and safety plan for each Project Site.



**10.2.7 Shoring and Structural Loading.** The Prime Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Project Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural Steele, is the sole responsibility of the Prime Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. The Prime Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural Steele work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Prime Contractor at no cost to the District.

**10.2.8 Conformance Within Established Limits.** The Prime Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the District or the Prime Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

**10.2.9 Subcontractor Enforcement of Rules.** Subcontractors shall enforce the District's and the Prime Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Project Site.

**10.2.10 Project Site Access.** The Prime Contractor and the Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the Project Site designated by the District, park only in those areas designated by the District, which areas may be on or off the Project Site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

### Section 10.3 EMERGENCIES

**10.3.1 Emergency Action.** In an emergency affecting the safety of persons or property, the Prime Contractor shall take any action necessary, at the Prime Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Prime Contractor on account of an emergency shall be determined as provided in Part 8.

**10.3.2 Accident Reports.** The Prime Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses in conformance with Subsection 10.1.4. In addition, if death, serious personal injuries, or serious property

damages are caused, the accident shall be reported in accordance with Subsection 10.1.4, immediately by telephone or messenger to the District.

#### Section 10.4 HAZARDOUS MATERIALS

**10.4.1 Discovery of Hazardous Materials.** In the event the Prime Contractor encounters or suspects the presence on the Project Site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by Section 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Prime Contractor shall immediately stop Work in the area affected and report the condition to the District, the Construction Manager and the Architect in writing, whether or not such material was generated by the Prime Contractor or the District. The Work in the affected area shall not thereafter be resumed, except by written agreement of the District and the Prime Contractor, if in fact the material is asbestos, PCB, or other hazardous material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos, PCB, or other hazardous material, or when it has been rendered harmless by written agreement of the District and the Prime Contractor.

**10.4.2 Hazardous Material Work Limitations.** In the event that the presence of hazardous materials is suspected or discovered on the Project Site, the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Prime Contractor shall not be required perform any Work in the affected area of the Project Site relating to asbestos, PCB, or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

**10.4.3 Indemnification for Hazardous Material Caused by Prime Contractor.** In the event hazardous materials on the Project Site are caused by the Prime Contractor, the Prime Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Prime Contractor's generation of hazardous material on the Project Site. In addition, the Prime Contractor shall defend, indemnify and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site.

**10.4.4 Terms of Hazardous Material Provision.** The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of the Contract.

### **PART 11 INSURANCE AND BONDS**

#### Section 11.1 PRIME CONTRACTOR'S LIABILITY INSURANCE

**11.1.1 Insurance Requirements.** Before the commencement of the Work, the Prime Contractor shall purchase from and maintain in a company or companies lawfully authorized to

do business in California as admitted carriers or approved surplus lines with a financial rating of at least A- status as rated in the most recent edition of Best's Insurance Reports or as otherwise set forth in the Special Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Prime Contractor's operations under the Contract and for which the Prime Contractor may be legally liable, whether such operations are by the Prime Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- (i) Claims for damages arising from bodily injury, sickness, disease, or death of any person requiring, as an employee claim, indemnification and coverage of the District;
- (ii) Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Prime Contractor or by another person;
- (iii) Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;
- (iv) Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;
- (v) Claims involving contractual liability applicable to the Prime Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Prime Contractor and the Subcontractors;
- (vi) Claims involving completed operations, independent contractors' coverage, and broad-form property damage, without any exclusions for collapse, explosion, demolition and abatement, underground coverage, and excavating (XCU); and
- (vii) Claims involving sudden or accidental discharge of contaminants or pollutants.

**11.1.2 Subcontractor Insurance Requirements.** The Prime Contractor shall require its Subcontractors to take out and maintain similar public liability insurance and property damage insurance required under Subsection 11.1.1 in like amounts. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of Subsection 11.1.1 without prior written approval of the District.

**11.1.3 Additional Insured Endorsement Requirements.** The Prime Contractor shall name, on any policy of insurance required under Section 11.1, the District, Construction Manager, Architect, Project Inspector, the State of California, their officers, employees, agents and independent contractors as additional insureds. Subcontractors shall name the Prime Contractor, the District, Construction Manager, Architect, Project Inspector, and the State of California, their officers, employees, agents and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be a CG 2010 1185 form and state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Prime Contractor pursuant to Subsection 11.1.1 must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance. Contractor shall also provide contractual liability coverage equivalent to ISO Form CG 00 01.

#### Section 11.2 WORKERS' COMPENSATION INSURANCE

During the term of the Contract, the Prime Contractor shall provide workers' compensation insurance for all of the Prime Contractor's employees engaged in Work under the Contract on or at the Project Site and, in case any of the Prime Contractor's Work is subcontracted, the Prime Contractor shall require the Subcontractor to provide Workers' Compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Prime Contractor's insurance. In case any class of employees engaged in Work under the Contract on or at the Project Site is not protected under the Workers' Compensation laws, the Prime Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Prime Contractor shall file with the District certificates of insurance as required under Section 11.6 and in compliance with Labor Code Section 3700.

#### Section 11.3 BUILDER'S RISK - "ALL RISK" INSURANCE

The Prime Contractor will procure and maintain Builder's Risk, Course of Construction or similar property coverage for the Project. Such insurance will have a \$5,000 deductible.

#### Section 11.4 FIRE INSURANCE

The Prime Contractor will procure and maintain fire insurance for the Project. The Prime Contractor also shall be responsible for providing its own insurance for tools, equipment and other materials not intended to become a permanent component of the Project.

#### Section 11.5 OTHER INSURANCE

The Prime Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

#### Section 11.6 PROOF OF INSURANCE

The Prime Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under the Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

- (i) Certificates and insurance policies shall include the following clause:

“This policy shall not be non-renewed, canceled, or reduced in required limits of liability or amounts of insurance until notice has been mailed to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.”

- (ii) Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

- (iii) Certificates of insurance shall clearly state that the District, Construction Manager and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

- (iv) The Prime Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

#### Section 11.7 COMPLIANCE

In the event of the failure of any Prime Contractor to furnish and maintain any insurance required by this Part 11, the Prime Contractor shall be in default under the Contract. Compliance by Prime Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Prime Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District, Construction Manager and the Architect.

#### Section 11.8 WAIVER OF SUBROGATION

Prime Contractor waives (to the extent permitted by law) any right to recover against the District, Construction Manager and the Architect for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

The provisions of this Section are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Prime Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

## Section 11.9 PERFORMANCE AND PAYMENT BONDS

**11.9.1 Bond Requirements.** Prior to commencing any portion of the Work, the Prime Contractor shall furnish separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, the Prime Contractor shall, upon request of the District, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the District. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Prime Contractor will release the Surety. If the Prime Contractor fails to furnish the required bonds, the District may terminate the Contract for cause.

**11.9.2 Surety Qualification.** Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure Section 995.120 shall be accepted. Surety must be a California-admitted Surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

**11.9.3 Alternate Surety Qualifications.** If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with Section 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

## **PART 12 UNCOVERING AND CORRECTION OF WORK**

### Section 12.1 UNCOVERING OF WORK

**12.1.1 Uncovering Work for Required Inspections.** If a portion of the Work is covered without Construction Manager, Project Inspector or Architect approval or not in compliance with the Contract Documents, it must, if required in writing by the Construction Manager, the Project Inspector or the Architect, be uncovered for the Project Inspector's or the Architect's observation and be replaced at the Prime Contractor's expense without change in the Contract Price or Contract Time.

**12.1.2 Costs for Inspections not Required.** If a portion of the Work has been covered which the Construction Manager, the Project Inspector or the Architect has not specifically requested to observe prior to its being covered, the Construction Manager, the Project Inspector or the Architect may request to see such Work, and it shall be uncovered by the Prime Contractor. If such Work is in accordance with the Contract Documents, costs to uncover and replace shall, by appropriate Change Order, be charged to the District. If such Work is not in accordance with Contract Documents, the Prime Contractor shall pay such costs unless the condition was caused by the District or a separate Prime Contractor, in which event the District shall be responsible for payment of such costs to the Prime Contractor.

## Section 12.2 CORRECTION OF WORK

**12.2.1 Correction of Rejected Work.** The Prime Contractor shall promptly correct the Work rejected by the Project Inspector or the District upon recommendation of the Construction Manager or the Architect as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not fabricated, installed, or completed. The Prime Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Project Inspector's or the Architect's services and expenses made necessary thereby.

**12.2.2 Two-Year Warranty Corrections.** If, within two (2) years after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established under Section 9.11.1, or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Prime Contractor shall correct it promptly after receipt of written notice from the District to do so unless the District has previously given the Prime Contractor a written acceptance of such condition. This two (2) year period shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Subsection 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition. This Subsection shall not limit or reduce the length of any warranties or guaranties required by the Contract Documents to have a duration of more than one (2) years.

**12.2.3 District's Rights if Prime Contractor Fails to Correct.** If the Prime Contractor fails to correct nonconforming Work within a reasonable time, the District may correct it in accordance with Section 9.7.

## **PART 13 MISCELLANEOUS PROVISIONS**

### Section 13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located.

## Section 13.2 SUCCESSORS AND ASSIGNS

The District and the Prime Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without prior written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

## Section 13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

## Section 13.4 RIGHTS AND REMEDIES

**13.4.1 Duties and Obligations Cumulative.** Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

**13.4.2 No Waiver.** No action or failure to act by the Project Inspector, the District, the Construction Manager or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

## Section 13.5 TESTS AND INSPECTIONS

**13.5.1 Compliance.** Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Title 24, and with all other applicable laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

**13.5.2 Independent Testing Laboratory.** The District will select and pay an independent testing laboratory to conduct all tests and inspections. Selection of the materials required to be tested shall be made by the laboratory or the District's representative and not by the Prime Contractor. Any costs or expenses of inspection or testing incurred outside of a fifty (50) mile radius from the Project Site or not located in a contiguous county to the Project Site, whichever distance is greater, shall be paid for by the District, invoiced by the District to the Prime Contractor, and deducted from the next Progress Payment.

**13.5.3 Advance Notice to Project Inspector.** The Prime Contractor shall notify the Project Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Project Inspector may arrange for same. The Prime Contractor shall



notify the Project Inspector a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Project Inspector may arrange for the testing of the material at the source of supply.

**13.5.4 Testing Off-Site.** Any material shipped by the Prime Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Project Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

**13.5.5 Additional Testing or Inspection.** If the Construction Manager, the Project Inspector, the Architect, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Section 13.5.1, the Project Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Section 13.5.7.

**13.5.6 Costs for Retesting.** If such procedures for testing, inspection, or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Prime Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's and Construction Manager's services and expenses. Any such costs shall be paid by the District, invoiced to the Prime Contractor, and deducted from the next Progress Payment.

**13.5.7 Costs for Premature Test.** In the event the Prime Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Prime Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Construction Manager's, the Project Inspector's and Architect's fees and expenses, and the amount of the invoice of shall be deducted from the next Progress Payment.

## Section 13.6 TRENCHES AND OTHER EXCAVATIONS

### **13.6.1 Trenches or Excavations Deeper Than Four Feet.**

**13.6.1.1** The provisions of this Subsection 13.6.1 shall be effective only if the Project involves digging trenches or other excavations that extend deeper than four (4) feet below the surface of the Project Site.

**13.6.1.2** The Prime Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any: (i) material that the Prime Contractor believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; (ii) subsurface or latent physical conditions at the Project Site differing from those indicated, including geological, soils, and or water table issues

that impede construction or increase the construction cost; and/or (iii) unknown physical conditions at the Project Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

**13.6.1.3** The District shall promptly investigate the conditions identified by the Prime Contractor pursuant to Article 13.6.1.2 of this Section. If the District determines that such conditions exist and cause a decrease or increase in the Prime Contractor's cost of, or the time required for, performance of the Contract, the District shall issue a Change Order in accordance with the procedures set forth in these General Conditions. If asbestos-related work or hazardous substance removal is required that is not disclosed in the Contract Documents, such work shall be performed pursuant to a contract separate from any other Work to be performed as required by Section 25914.2 of the Health and Safety Code, as may from time to time be amended.

**13.6.1.4** In the event a dispute arises between the District and the Prime Contractor in regard to whether any condition identified by the Prime Contractor pursuant to Article 13.6.1.2 of this Section actually exists, or causes a decrease or increase in the Prime Contractor's cost of, or time required for, performance of the Contract, the Prime Contractor shall not be excused from completing the Project in accordance with the Project schedule, but shall proceed with all Work to be performed pursuant to the Contract Documents. However, the Prime Contractor may file a Claim as provided in these General Conditions.

#### **13.6.2 Trenches Deeper Than Five Feet.**

**13.6.2.1** *Statutory Requirement.* Pursuant to Labor Code Section 6705, if the Contract Price exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Prime Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or Architect, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

**13.6.2.2** *Excavation Safety.* If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the District or by the person to whom authority to accept has been delegated by the District.

**13.6.2.3** *No Tort Liability of District.* Nothing in Labor Code Section 6705 or this Subsection 13.6.2 shall be construed to impose tort liability upon the District or any of its employees.

**13.6.3 No Excavation Without Permits.** The Prime Contractor shall not commence any excavation Work until it has secured all necessary permits including the required OSHA and

Cal-OSHA excavation/shoring permits. Any permits shall be prominently displayed on the Project Site prior to the commencement of any excavation.

#### Section 13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE

**13.7.1 Wage Rates.** This Project is a public work and is subject to the payment of prevailing wages. Pursuant to the provisions of Article 2 (commencing at Section 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the Governing Board has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public Work is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations ("Director"). These rates are on file with the Clerk of the Governing Board, and copies will be made available to any interested party on request. The Prime Contractor shall post a copy of such wage rates at the Project Site.

**13.7.2 Holiday and Overtime Pay.** Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half (1-1/2) times the above specified rate of per diem wages, unless otherwise specified.

**13.7.3 Wage Rates Not Affected by Subcontracts.** The Prime Contractor shall pay and shall cause to be paid each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Prime Contractor or any Subcontractor and such workers.

**13.7.4 Travel and Subsistence.** The Prime Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project travel and subsistence payments, as such travel and subsistence payments are defined by the Department of Industrial Relations in accordance with Labor Code Section 1773.1.

**13.7.5 Forfeiture and Payments.** Pursuant to Labor Code Section 1775, the Prime Contractor shall pay a penalty to the District for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages, determined by the Director, for such craft or classification in which such worker is employed for any Work done under the Agreement by the Prime Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of the Prime Contractor's mistake, inadvertence, or neglect in failing to pay the correct prevailing rate of per diem wage, the previous record of the Prime Contractor in meeting its prevailing rate of per diem wage obligations, or the Prime Contractor's willful failure to pay the correct prevailing rate of per diem wages. A mistake, inadvertence, or neglect in failing to pay the correct prevailing rate of per diem wage is not excusable if the Prime Contractor had knowledge of it or the obligations under this part. The difference between such prevailing rate of per diem wage and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing rate of per diem wage shall be paid to each worker by the Prime Contractor.

## Section 13.8 RECORD OF WAGES PAID: INSPECTION

### **13.8.1 Application of Labor Code.** Pursuant to Section 1776 of the Labor Code:

- (i) The Prime Contractor and each Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Work.
- (ii) The payroll records enumerated under subdivision (i) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Prime Contractor on the following basis:
  - (a) A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
  - (b) A certified copy of all payroll records enumerated in subdivision (i) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
  - (c) A certified copy of all payroll records enumerated in subdivision (i) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to subparagraph (ii), the requesting party shall, prior to being provided the records, reimburse the costs of the preparation by the Prime Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Prime Contractor.
  - (iii) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division.
  - (iv) The Prime Contractor shall file a certified copy of the records enumerated in subdivision (i) with the entity that requested such records within ten (10) days after receipt of a written request.
  - (v) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated in

such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the contractor awarded or performing the contract shall not be marked or obliterated.

(vi) The Prime Contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (i), including the street address, city and county, and shall, within five (5) working days, provide a notice of a change of location and address.

(vii) The Prime Contractor shall have ten (10) days in which to comply, subsequent to receipt of written notice requesting the records enumerated in subdivision (i). In the event that the Prime Contractor fails to comply within the ten (10) day period, the Prime Contractor shall, as a penalty to the District, forfeit One Hundred Dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Labor Standards Enforcement, such penalties shall be withheld from the progress payments then due.

THE PRIME CONTRACTOR IS FULLY RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION 13.8 AND SECTIONS 13.7 AND 13.9.

#### Section 13.9 APPRENTICES

**13.9.1 Apprentice Wages and Definitions.** All apprentices employed by the Prime Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade to which he or she is registered, and as determined by the Director, and shall be employed only at the Work of the craft or trade to which he or she is registered. Only apprentices, as defined in Section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprenticeship agreements under Chapter 4 (commencing with Section 3070) of Division 3, are eligible to be employed under the Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training.

**13.9.2 Employment of Apprentices.** Prime Contractor shall comply with the requirements of Labor Code Section 1777.5. When the Prime Contractor to whom the Contract is awarded by the District, or any Subcontractor, in performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Prime Contractor and Subcontractor shall apply to the appropriate and approved joint apprenticeship committee administering the apprenticeship standards of the craft or trade in the area of the Project Site, for a certificate approving the Prime Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. The joint apprenticeship committee or committees, subsequent to approving the subject Prime Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Prime Contractor or Subcontractor in order to comply with this Section. The Prime Contractor and each Subcontractor shall submit the Contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed

under the Contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the joint apprenticeship committee or committees administering the apprenticeship standards of the crafts or trade in the area of the Project Site to ensure equal employment and affirmative action and apprenticeship for women and minorities. The Prime Contractor and Subcontractors shall not be required to submit individual applications for approval to local joint apprenticeship committees provided they are already covered by the local apprenticeship standards. The ratio of work performed by apprentices to journeymen shall be in accordance with Labor Code Section 1777.5.

**13.9.2.1**      *Apprenticeable Craft or Trade.* “Apprenticeable craft or trade” as used in this Part means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council.

**13.9.3 Apprentice Fund.** The Prime Contractor or any Subcontractor that, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade, shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project Site. The Prime Contractor or Subcontractor may take as a credit for payments to the Council any amounts paid by the Prime Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project Site. The Prime Contractor or Subcontractor may add the amount of the contributions in computing its bid for the Contract.

**13.9.4 Prime Contractor Compliance.** The Prime Contractor is responsible for compliance with this Section 13.9 and Section 1777.5 of the Labor Code for all apprenticeable occupations.

## Section 13.10 ASSIGNMENT OF ANTI-TRUST CLAIMS

**13.10.1 Application.** Pursuant to Public Contract Code Section 7103.5 , in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Prime Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 [commencing with §16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Prime Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

**13.10.2 Assignment of Claim.** Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

#### Section 13.11 STATE AUDIT

Pursuant to and in accordance with the provisions of Government Code § 8546.7, if the Contract involves an expenditure of public funds in excess of \$10,000, the District and the Prime Contractor are subject to examination and audit by the State of California for a period of three (3) years after final payment is made under the Contract. The Prime Contractor shall preserve all records related to the Project (financial and otherwise) for such three (3) year period or, if an audit is commenced within such period, until the audit is complete. The Prime Contractor shall require that each of its Subcontractors preserve all records related to the Project for such three (3) year period or, if an audit is commenced within such period, until the audit is complete.

#### Section 13.12 STORM WATER RUN-OFF

**13.12.1 Local Agency Requirements.** The Prime Contractor shall, as necessary in connection with the Work, comply with the applicable requirements of the County, any drainage or storm water district, or other local agency with jurisdiction in regard to discharges of storm water to storm-drain systems or watercourses, including, without limitation, requirements of applicable municipal storm water management programs. It is the Prime Contractor's obligation to ascertain the National Pollutant Discharge Elimination System ("NPDES") and Water Pollution Prevention Plan ("SWPPP") requirements, but the Construction Manager may provide assistance.

**13.12.2 NPDES Permit Requirements.** The Prime Contractor shall, as necessary in connection with the Work, comply with all requirements of any applicable NPDES permit and Storm SWPPP. It is the Prime Contractor's obligation to ascertain the NPDES and SWPPP requirements, but the Construction Manager may provide assistance. The Prime Contractor shall not disturb any on-site or off-site run-off control measures in place for the Project, and shall replace and/or restore any such control measures damaged in connection with the Work being performed on behalf of the Prime Contractor, as required by the Construction Manager. Failure to comply with the NPDES permit or the SWPPP is a violation of federal and/or State law. The Prime Contractor shall indemnify, defend and hold-harmless each District Indemnitee, in accordance with the Contract Documents, with respect to any noncompliance with the NPDES permit or the SWPPP.

**13.12.3 Responsibility for NPDES Permit and SWPPP.** If this Subsection 13.12.3 is made applicable as set forth in the Special Conditions, the Prime Contractor shall be responsible for filing a "Notice of Intent" and obtaining coverage under the applicable NPDES permit for the Project, and for preparing, obtaining approvals of, implementing and monitoring a SWPPP for the Project. The Prime Contractor shall provide a draft of the SWPPP to the District

as soon as practicable after execution of the Contract, which shall be subject to review by the Construction Manager.

(i) The Prime Contractor shall be required to comply with all conditions of the State Water Resources Control Board National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity ("Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Prime Contractor shall be responsible for filing the Notice of Intent and for obtaining the Permit. The Prime Contractor shall be solely responsible for preparing and implementing a SWPPP prior to initiating Work. In bidding on this Contract, it shall be the Prime Contractor's responsibility to evaluate the cost of procuring the Permit and preparing the SWPPP as well as complying with the SWPPP and any necessary revision to the SWPPP. The Prime Contractor shall comply with all requirements of the State Water Resources Control Board. The Prime Contractor shall include all costs of compliance with specified requirements in the Contract amount.

(ii) The Prime Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, monitoring and reporting requirements as required by the Permit and the SWPPP. Prime Contractor shall provide copies of all reports and monitoring information to the District Representative, Architect, and Construction Manager. The Prime Contractor shall provide to the District a copy of the NPDES permit (and all supporting rules and orders) and, after final approval, a copy of the SWPPP. The Prime Contractor shall implement and comply with all provisions of the NPDES permit, the SWPPP and other requirements of the State Water Resources Control Board in connection with the Work, including, without limitation, the standard provisions, monitoring and reporting requirements as required by the NPDES permit.

(iii) The Prime Contractor shall comply with the lawful requirements of any applicable municipality, the District, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

(iv) Storm, surface, nuisance, or other waters may be encountered at various times during construction of the work. Therefore, the Prime Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

(v) Failure to comply with the Permit is in violation of federal and state law. The Prime Contractor hereby agrees to indemnify and hold harmless District, its



officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which District, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit arising out of or in connection with the Project, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the District, its officials, officers, agents, employees or authorized volunteers. District may seek damages from the Prime Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by the Prime Contractor's failure to comply with the Permit.

(vi) The Prime Contractor shall be responsible for removal and clean-up of all run-off and other control measures upon completion of the Work.

## **PART 14**

### **TERMINATION OR SUSPENSION OF THE CONTRACT**

#### **Section 14.1 TERMINATION BY THE PRIME CONTRACTOR FOR CAUSE**

**14.1.1 Grounds for Termination.** The Prime Contractor may terminate the Contract if the Work is stopped for a period of one-hundred and twenty (120) consecutive days through no act or fault of the Prime Contractor, a Subcontractor, a sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Prime Contractor is contractually responsible, and the Work is stopped as a result of:

- (i) Issuance of an order of a court or other public authority having jurisdiction; or
- (ii) An act of government, such as a declaration of national emergency.

**14.1.2 Notice of Termination.** If one of the above reasons exists and more than one hundred twenty (120) days has elapsed without any Work being performed, the Prime Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Construction Manager or the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

#### **Section 14.2 TERMINATION BY THE DISTRICT FOR CAUSE**

**14.2.1 Grounds for Termination.** The District may terminate the Contract and/or the Prime Contractor's right to proceed with the Work under the Contract if the Prime Contractor:

- (i) Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;

- (ii) Persistently or repeatedly is absent, without excuse, from the Project Site;
- (iii) Fails to make payment to Subcontractors;
- (iv) Unreasonably or persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
- (v) Otherwise is in substantial breach of a provision of the Contract Documents.

**14.2.2 Notification of Termination.** When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Prime Contractor and the Prime Contractor's Surety, if any, written notice of seven (7) days, terminate the Contract and/or the Prime Contractor's right to proceed with the Work under the Contract and may, subject to any prior rights of the Surety:

- (i) Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Prime Contractor;
- (ii) Accept assignment of subcontracts; and
- (iii) Complete the Work by any reasonable method the District may deem expedient.

**14.2.3 Payments Withheld.** If the District terminates the Contract for one of the reasons stated in Subsection 14.2.1, the Prime Contractor shall not be entitled to receive further payment until the Work is complete.

**14.2.4 Payments Upon Completion.** If the unpaid balance of the Contract Price exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Prime Contractor. If such costs exceed the unpaid balance, the Prime Contractor shall pay the difference to the District. The amount to be paid to the Prime Contractor, or District, as the case may be, shall be certified by the Construction Manager or the Architect upon application. This payment obligation shall survive completion of the Contract.

### Section 14.3 TERMINATION FOR CONVENIENCE OF DISTRICT

District, without need for cause, may terminate the Contract upon fifteen (15) calendar days of written notice to the Prime Contractor. In such a case, the Prime Contractor shall have no claims against the District except: (1) the actual cost for labor, materials, and services performed which may be documented through timesheets, invoices, receipts, or otherwise, and (2) ten percent (10%) profit and overhead, and (3) five percent (5%) termination cost of the total of items (1) and (2). The Prime Contractor shall remain liable in accordance with the Contract Documents for all Work performed prior to termination.

#### Section 14.4 REMEDIES OTHER THAN TERMINATION

If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Section 14.2, do any of the following:

- (i) Permit the Prime Contractor to continue under the Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Prime Contractor to the District on demand;
- (ii) If the workmanship performed by the Prime Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Prime Contractor to remove the faulty workmanship or defective materials and to replace the same with Work or materials that conform to the Contract Documents, in which event the Prime Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Prime Contractor; or
- (iii) Initiate procedures to declare the Prime Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Prime Contractor is ordered to replace any faulty workmanship or defective materials pursuant to subdivision (ii) above, the Prime Contractor shall replace the same with new Work or materials approved by the Construction Manager, the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Construction Manager, the Architect and the District shall direct, all Work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable Work or materials. In no event shall anything in this Section be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Prime Contractor that the remedies set forth in this Section are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

## Project Closeout (For Reference)

Item	GC Paragraph	
1	9.9.4	Contractor delivers O&M manuals to District at least 30 day prior to final inspection
2	9.9.1	prime contractor considers work substantially complete
3	9.9.1	prime contractor prepares and submits comprehensive list of items to be completed/corrected (Punch list)
4	9.9.1	prime contractor and sub-contractors complete items on punch list
5	9.9.1	CM inspect the Work
6	9.9.1	Arch inspect the Work
7	9.9.1	IOR inspect the Work
8	9.9.1	Contractor completes work identified by CM, AOR and IOR
9	9.9.5.1	Contractor performs punch list and completes work.
	iii	All commissioning & T&B is completed and reports submitted
	iv	All electrical circuits are scheduled and disconnects are labeled
	v	Complete painting
	vi	Doors complete with hardware and relieved of sticking and binding
	viii	Tops and bottoms of doors sealed
	viii	Floors completed as specified
	ix	Broken glass replaced and glass cleaned.
	x	Grounds cleared of equipment, raked clean of debris and trash removed
	xiii	Work cleaned
	xiii	Remove marks, dirt and labels from Finish work
	xiii	Final clean
10	9.9.1	Contractor submits request for additional inspection
11	9.9.1	IOR determines whether complete or not - repeat process until complete
12	9.11.1	Contractor provides written notice that all punch items are complete
13	9.11.1	CM and AOR perform final inspection
14	9.11.1	CM & AOR provide final inspection report to District and Contractor
15	9.11.1	Contractor completes work identified by CM and AOR if any and notifies the District, CM and Architect
16	9.11.1	District, CM and AOR inspect the work
	4.2.7 &	
17	9.11.1	CM and AOR determine date of completion and notify the District and Contractor
18	9.9.1	CM prepares and District files Notice of Completion
19	9.9.3.3	Contractor obtains Inspector's acceptance of corrected plans & specs
20	9.9.3.3	Contractor obtains Architect's acceptance of corrected plans & specs
21	9.9.3.3	Contractor scans plans and specifications to create .pdf's
22	n/a	Contractor obtains approval of scanned documents for accuracy of the compilation from Architect
23	n/a	Contractor produces three sets of black and white bond copies from the compiled pdf's
24	n/a	Contractor produces and delivers five sets of DVDs
	9.10.3.4	Contractor provides Record Drawing certification
25	9.9.6	Contractor provides letter to District identifying District personnel trained in the various systems.
26	9.11.1	Contractor submits final application for payment
	i	corrections completed

		iii	delivered guarantees, warranties, applications, and bonds
		iii	completed all items above
		iv	AOR issues final Certificate for Payment
		v	provide all unconditional and conditional releases per 9.4.2.3
			Deliver to District all manuals and materials required by the contract including
		vi	Certification per section 3.10.3.5
27	n/a		Contractor files DSA form 6
28	n/a		Contractor requests Owner to file NOT with SWRCB
29	4.2.7		Architect and CM issue final certificate for payment
30	n/a		Contractor submits application for release of retention

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

**SECTION 00720  
SPECIAL CONDITIONS**

**(00720)**  
**SPECIAL CONDITIONS**

- A. **TIME OF PERFORMANCE:** The work shall be commenced on the date stated in the District's Notice to Proceed (which date will be not less than **five (5)** consecutive calendar days from and after the date of the (Preliminary) Notice of Award) and shall be completed within **86** consecutive calendar days from and after the date stated in such notice to proceed, **and in accordance with the scheduled dates as specified below.** Construction period includes **five (5)** rain days and **five (5)** quiet/testing days. The District will have ownership of these rain and quiet days. District and Contractor each hereby stipulate that the stated performance period is accepted as reasonable and that no other performance period shall be acceptable unless accepted in writing (See Article 2 of Agreement and **Sections 8.3 and 8.4** of General Conditions.)

Work under this contract shall be scheduled and coordinated in compliance with the following:

1. See Bid Schedule for all required dates.
2. The contractor acknowledges that it fully understands the Project work to be performed has been scheduled by the District for a specific time period. In addition, the Contractor acknowledges that it fully understands that scheduling has been established for this Project in order to promote the best usage of school facilities and to timely provide an appropriate learning environment for students to the fullest extent possible. With these understandings in mind, pursuant to **Sections 14.2 and 14.3** of the General Conditions regarding the District's Right to Terminate Contract, it is acknowledged and understood by the Contractor that it is a substantial violation of the Contract for the Contractor to fail to provide all submittals in the time specified and identified. Furthermore, it is acknowledged and understood by the Contractor that it is a substantial violation of the Contract for the Contractor to fail to provide a full work crew or properly skilled workers with proper and sufficient materials and equipment from the first day of Project work scheduled as specified in the District's Notice to Proceed.

If the site will not be available after the Notice to Proceed date, Contractor shall utilize this time period for administrative tasks and initial mobilization and shall coordinate such activities with District.

B. **LIQUIDATED DAMAGES**

**Liquidated Damages – Submittals:** If technical submittals, contract, bonds, and certificates of insurance are not received by the District within the scheduled time period, the agreed liquidated damages established in **Section 8.4** of the General Conditions is Fifty Dollars (\$50.00) per day for each calendar day the start date is delayed.

**Liquidated Damages – Time of Completion:** If work under this contract is not complete within the specified time period, the agreed liquidated damages established in **Section 8.4** of the General Conditions is One-Thousand Dollars (\$1,000.00) per day for each calendar day the completion date is delayed.

- C. **DOCUMENTS FURNISHED:** The number of copies of drawings and specifications to be furnished to Contractor free of charge, per **Section 3.10** of the General Conditions, is two (2). Additional copies of the drawings are the responsibility of the contractor.
- D. **BONDS:** Contractor shall provide (i) a bid bond in the amount of ten (10%) of the contract price; (ii) a payment bond in the total amount of bid or as specified in the Information to Bidders; and (iii) a performance bond in the amount of one hundred percent (100%) of the contract price or as specified in the Information for Bidders.
- E. **INSURANCE:** Comply with insurance requirements as provided in **Section 11.1 PRIME CONTRACTOR'S LIABILITY INSURANCE** of the General Conditions. Before the commencement of the Work, the Prime Contractor shall purchase from and maintain, in a company or companies lawfully authorized to do business in California with a financial rating of at least **A-** status as rated in the most recent edition of Best's Insurance Reports, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Prime Contractor's operations under the Contract and for which the Prime Contractor may be legally liable, whether such operations are by the Prime Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

For Contracts up to \$500,000 the following limits apply:		Contractor	Subcontractor
Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than:	\$ 1,000,000.00	\$ 1,000,000.00	
Project Specific Aggregate (for this project only)	\$ 2,000,000.00	\$ 2,000,000.00	
OR			
Commercial General Liability and Property Damage Insurance (including automobile insurance) which provides limits of not less than:			
(a) Per occurrence (combined single limit)	\$ 1,000,000.00	\$ 1,000,000.00	
(b) Project Specific Aggregate (for this project only)	\$ 2,000,000.00	\$ 2,000,000.00	
(c) Products/Completed Operations	\$ 1,000,000.00	\$ 1,000,000.00	
(d) Personal & Advertising Injury limit	\$ 1,000,000.00	\$ 1,000,000.00	
For Contracts from \$500,000 - \$1 Million the following limits apply:		Contractor	Subcontractor
Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than:	\$ 2,000,000.00	\$ 2,000,000.00	
Project Specific Aggregate (for this project only)	\$ 3,000,000.00	\$ 3,000,000.00	
OR			
Commercial General Liability and Property Damage			



<b>Insurance</b> (including automobile insurance) which provides limits of not less than:		
(a) Per occurrence (combined single limit)	\$ 2,000,000.00	\$ 2,000,000.00
(b) Project Specific Aggregate (for this project only)	\$ 3,000,000.00	\$ 3,000,000.00
(c) Products/Completed Operations	\$ 2,000,000.00	\$ 2,000,000.00
(d) Personal & Advertising Injury limit	\$ 2,000,000.00	\$ 2,000,000.00
<b>For Contracts greater than \$1 Million the following limits apply:</b>		
	<b>Contractor</b>	<b>Subcontractor</b>
<b>Comprehensive General Liability Insurance</b> with a combined single limit per occurrence of not less than:		
	\$ 3,000,000.00	\$ 3,000,000.00
Project Specific Aggregate (for this project only)	\$ 5,000,000.00	\$ 5,000,000.00
<b>OR</b>		
<b>Commercial General Liability and Property Damage Insurance</b> (including automobile insurance) which provides limits of not less than:		
(a) Per occurrence (combined single limit)	\$ 3,000,000.00	\$ 3,000,000.00
(b) Project Specific Aggregate (for this project only)	\$ 5,000,000.00	\$ 5,000,000.00
(c) Products/Completed Operations	\$ 3,000,000.00	\$ 3,000,000.00
(d) Personal & Advertising Injury limit	\$ 3,000,000.00	\$ 3,000,000.00

**Certificate Holder:** Certificate Holder shall be Grossmont Union High School District.

**Insurance Covering Special Hazards:** The following special hazards shall be covered by riders or riders to above-mentioned commercial liability insurance or property damage insurance policy or policies of insurance, or by special policies of insurance, in amounts as follows:

- a. Automotive and truck, where operated, in automobile amounts above;
- b. Material hoist, where used, in automobile amounts above.

F. **EXECUTED COPIES:** The number of executed copies of the Agreement, the Performance Bond, and the Payment Bond for Public Works required is **two (2)**.

G. **LICENSE CLASSIFICATION:** Each bidder shall be a licensed Contractor pursuant to the Business and Professions Code and shall be licensed in the following classification:

**B**

- H. **FINGERPRINTING:** Pursuant to the provisions of **Section 3.3** of the General Conditions, District Determination of Fingerprinting Requirement Application is as follows:

The District has considered the totality of the circumstances concerning the Project and has determined that the Contractor, Sub-Contractors, and their respective employees:

Fingerprinting and background checks ARE required of all Contractors' jobsite supervisors. This information shall be readily available to view by the District at any time.

Contractor must provide certification of Department of Justice Clearance for job site supervisor's employed by the Contractor and all its Subcontractors obtained through LiveScan. Clearance must be obtained using the Contractor's ORI (Origination Number). Local agency clearances including but not limited to DMV, Police Department, and San Diego Sheriff are not acceptable.

When necessary, the District may call for fingerprinting of all employees if there will be more than limited contact with school students.

- I. **TEMPORARY FACILITIES/UTILITY USAGE:** Contractor shall provide temporary power/utilities from other sources to all trailers and work spaces as required to complete the work listed in these documents. This includes but is not limited to water, electrical, gas, sewer, phones/data systems. Contractor shall not use District utilities.
- J. **LABOR COMPLIANCE:** Contractor is to submit certified payroll records (CPRs) to the Department of Industrial Relations ("DIR") Labor Commissioner and awarding body. Visit the DIR website for additional information at:  
<http://www.dir.ca.gov/Public-Works/SB854.html>

Contractor is to retain all certified payrolls for a period of no less than (5) five years from date of completion as noted in the General Conditions.

- K. **STORM WATER POLLUTION PREVENTION PLAN:** Contractor shall upon receipt of the Notice to Proceed, contact the District to coordinate the filing of the Notice of Intent for the Storm Water Permit with the Legally Responsible Party ("LRP") in accordance with General Conditions Section 13.12.3 and shall make payment of the application fee and any annual renewal fees directly to the State Water Resources Control Board ("SWRCB"). Responsibility for obtaining the required storm water permit remains with the Contractor and as such, the Contractor shall facilitate and coordinate any actions required of the District in obtaining the permit. Similarly, the Contractor shall, as part of their closeout requirements, coordinate the filing of the Notice of Termination with the District. District shall reimburse Contractor for any fees paid to SWRCB.
- L. **SAFETY/SECURITY:** Site safety and security is the responsibility of the Contractor per Section 10, Protection of Persons and Property until achievement of Substantial Completion. The Contractor is to conduct safety meetings once per week with the Contractor's employees, subcontractors and any tiers thereof. **Minutes of the safety meetings are to be submitted to the Construction Manager ("CM") on that date's Daily Report, prior to approval of monthly pay requests.** In addition, the General

Contractor must provide the CM and Inspector of Record with a copy of its safety plan, SWPPP Plan, MSDS sheets/binder, and copies of safety plans from each of the General Contractor's subcontractors at the start of the Project. The General Contractor is required to keep the school site and the construction zone in a clean, safe and secure condition.

- M. **DISTRICT STANDARDS:** The District has made a finding that certain brands or trade names are necessary in order to maintain conformity among its campuses, to maintain compatibility with existing systems, and to streamline maintenance and parts storage, so substitutions will only be permitted as described in the General Conditions and the Resolutions are included at the end of the Special Conditions. Executed copies of the resolutions are available at the District's Purchasing Department.

N. **AS-BUILT DRAWINGS**

General Contractor shall maintain a clean, undamaged set of contract drawings and shop drawings, in addition to maintaining one complete set of record drawings in the Construction Manager's/Inspector of Record's office. Prior to approval of monthly pay requests, CM Project Superintendent, the Inspector of Record, and the Architect will verify the as-built drawings and updating of project record drawings in the CM trailer.

The General Contractor shall be monetarily responsible for reproduction of the final record set of drawings (as-builts) for all category scopes of work at the conclusion of the project.

O. **WARRANTY**

In addition to all applicable manufacturers' warranties required per the Technical Specifications, the Prime Contractor as well as all subcontractors shall utilize the attached workmanship/installation warranty form and deliver a completed warranty form for their portion of the work to the CM prior to final payment.

P. **DEFINITIONS General Conditions section 1.2 Definitions is hereby supplemented as follows:**

1. **Substantial Completion:** The date upon which all items of work have been provided and are considered complete by the Contractor. The Inspector of Record and the Construction Manager shall also concur that all items of work have been provided. Or, if mutually agreed between the District and the Contractor, the date upon which the District takes occupancy of the facility. Partial occupancy, per Section 9.10, shall not be considered Occupancy for the purpose of establishing the date of Substantial Completion. The District shall not be obligated to Occupy the facility if all items of work have not been completed. Alternatively, the date upon which the District accepts the work shall be considered the date of substantial completion.
2. **Final Completion:** The date when all punch list items have been cleared by the Inspector of Record and all other contractual requirements, including but not limited to, all testing, inspections, reports, record documents, sitework, software, programming, and any incomplete Change Order documents have been completed to the satisfaction of the Construction Manager, District and Architect in accordance with Section 9.11.

3. Construction Period: Beginning on and including the Notice to Proceed date and ending on and including the Final Completion Date as indicated in the original Contract Schedule as amended from time to time by appropriate Change Order.

#### **Q. INSPECTIONS**

General Conditions section 13.5.2 is hereby supplemented as follows: All shop fabricated steel requires continuous inspection by a DSA certified inspector provided by the Owner. One inspector is capable of observing as many as ten welders simultaneously depending on the shop and project conditions. Consequently, the Contractor is expected to provide sufficient manpower during shop fabrication to keep the Inspector fully engaged. For this purpose, the Contractor shall provide an average of six welders per inspector per day. Should the average number of welders be less than six per day, the Contractor shall be back charged through the change order process on a prorated basis. For example, if the Contractor only provides 5 welders per day on average, one sixth of the cost of inspection shall be back charged to the Contractor. Similarly, field welding operations that require continuous inspection shall be staffed in the same way as shop welding. The Contractor shall be back charged for providing fewer than an average of six welders per day, per location. All load bearing masonry work requires continuous inspection by a DSA certified inspector provided by the Owner. Multiple crews can be observed by one inspector. Consequently, the Contractor shall provide as many crews as possible that can safely work on the project. The Contractor shall be similarly back charged for providing fewer crews than possible on the job. The Construction Manager shall determine the maximum number of crews that can safely work on the job for the purposes of determining whether any back charges would be due. The Contractor is obligated to plan any work that requires continuous inspection in such a way that the total duration of that activity is reduced to the minimum in an effort to restrain the cost of continuous inspection to the Owner.

#### **R. UTILITY CONNECTION REQUIREMENTS**

General Conditions section 9.9.2 is hereby supplemented as follows: In addition to any punchlists and inspections performed by the Owner, Architect or Construction Manager, the Contractor shall obtain and complete a punch list for any Work within the public right of way or work performed on public utilities from each jurisdiction's inspector. Corrective work shall be completed according to the instructions of each jurisdiction's inspector whether or not those instructions are consistent with the original approved contract documents. The Contractor shall cause all corrective work to be completed, to the satisfaction of each inspector, at no additional charge to the Owner.

#### **S. ABATEMENT SPECIFICATIONS n/a**

General Conditions section 3.8 is hereby supplemented as follows: Hazardous Materials Abatement specifications dated ( ) prepared by ( ) are hereby incorporated into this contract for construction.

#### **T. MISCELLANEOUS PROVISIONS**

1. All trades excavating in or traversing existing landscaped areas shall be responsible for repairing any damage to irrigation and plants. Plants shall be avoided and protected.

2. No material storage or parking in fire lane. Vehicles/machinery parked in fire lane must have spotters assigned to watch and secure the vehicle. Failure to follow this requirement will force the towing of the vehicle, at Contractor's expense.
3. No personal vehicles onsite; all personal vehicles (including prime contractor and tiered subcontractor vehicles) must park offsite or in designated parking areas. Failure to follow this requirement will force the towing of the vehicle.
4. All areas of work may not be available at the same time and may require more than one move-on by the Prime Contractor and tiered subcontractors to complete an item of work. Contractor shall not be entitled to additional compensation for additional mobilization.
5. For multi-prime contracts, the CM has the authority to reasonably update, modify, revise and otherwise change the project schedule to accommodate the best interests of the District at any time during course of construction, with express District consent. Although the CM will make every effort to accommodate all Prime and Subcontractors in a fair and productive manner, no construction schedule is without challenges. Prime and Subcontractors shall conform to these schedule revisions immediately, cooperatively and without any additional cost to the District or CM. Likewise all Prime and Subcontractors shall provide regular and timely schedule input and provide adequate resources required to meet schedule requirements in a cooperative and proactive manner. In as much as possible, CM shall accommodate this Prime and Subcontractor input in so far as it works for the District and all other Prime and Subcontractors so that the CM schedule will ultimately prevail.

#### **U. ADMINISTRATION OF THE CONTRACT**

For multi-prime contracts, the Construction Manager has the authority to coordinate the Work under this Contract with work being performed by separate contractors on the Site. The Construction Manager will assist the District in coordinating the Contractor's Construction Schedule with construction schedules of separate contractors performing work on the Site.

**PROJECT WARRANTY  
FOR THE FOLLOWING SPECIFICATION(S) & SCOPE OF WORK**

Description of the Work warranted by this contractor: \_\_\_\_\_

\_\_\_\_\_

Drawing sheets describing the Work warranted by this contractor: \_\_\_\_\_

\_\_\_\_\_

Specification sections describing the Work warranted by this contractor: \_\_\_\_\_

\_\_\_\_\_

We, the undersigned, do hereby warrant and guarantee that the portion of the Work described above which we have provided for

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by us, together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of **TWO (2) YEARS** from date of recording of the Notice of Completion by the District, **GROSSMONT UNION HIGH SCHOOL DISTRICT**, without any expense whatsoever to the said District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with the above-mentioned conditions within **TEN (10) business days**, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize the District to have said defective Work repaired or replaced to be made good, and agree to pay to the District upon demand all moneys that the District may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Date: \_\_\_\_\_ Signed: \_\_\_\_\_  
(Subcontractor – As Applicable)

Date: \_\_\_\_\_ Signed: \_\_\_\_\_  
(General Contractor)

Local Representative to be contacted for services:

Name: \_\_\_\_\_ Phone No. \_\_\_\_\_

Address: \_\_\_\_\_

State License No: \_\_\_\_\_

## GROSSMONT UNION HIGH SCHOOL DISTRICT

### RESOLUTION AUTHORIZING STANDARDIZING ) OF PROPRIETARY SPECIFICATIONS )

**WHEREAS**, the Governing Board of the Grossmont Union High School District finds that it is in its best interest to utilize standardized products in order to maintain conformity, where possible, among its campuses, compatibility with existing systems, and to streamline maintenance; and

**WHEREAS**, the Governing Board of the Grossmont Union High School District finds that the following manufacturers provide products that match other products in use:

Uninterruptible power supplies:	American Power Conversion (APC)
Software for APC units:	PowerChute Plus
Intercom/Clock/Speaker assemblies, enclosures, etc:	Atlas Sound
CATV distribution amplifiers and accessories:	Blonder -Tongue Laboratories, Inc
Data network switches and routers:	Cisco Systems
Servers, laptop/notebook and desktop computers:	Dell or Lenovo
Wall mount cabinets for IT equipment	Southwest Data Products
Camera mounts and mounting adapters:	Videolarm
Surveillance cameras (Steele Canyon HS):	Mobotix
Surveillance software systems (Steele Canyon HS):	On-Net Surveillance Systems, Inc.
; and	

**NOW, THEREFORE, BE IT RESOLVED** by the Governing Board of the Grossmont Union High School District as follows:

1. All of the recitals set forth above are true.
2. The Governing Board determines that aforementioned brands shall be the Districtwide standards.

**PASSED AND ADOPTED** by the Governing Board of the Grossmont Union High School District at El Cajon, California, on this 15th day of \_\_\_\_\_, 2020, by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

STATE OF CALIFORNIA     )  
  )  
COUNTY OF SAN DIEGO    )

I, Jim Kelly, Clerk of the Governing Board of the Grossmont Union High School District of El Cajon, California, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by said Board at the regular meeting thereof at the time and place of vote stated, which resolution is on file and of record in the office of said Board.

## GROSSMONT UNION HIGH SCHOOL DISTRICT

### RESOLUTION AUTHORIZING STANDARDIZING ) OF PROPRIETARY SPECIFICATIONS )

**WHEREAS**, the Governing Board of the Grossmont Union High School District finds that it is in its best interest to utilize standardized products in order to maintain conformity, where possible, among its campuses, compatibility with existing systems, and to streamline maintenance; and

**WHEREAS**, the Governing Board of the Grossmont Union High School District finds that Otis Elevator Company elevators match the system currently in use; and

**NOW, THEREFORE, BE IT RESOLVED** by the Governing Board of the Grossmont Union High School District as follows:

1. All of the recitals set forth above are true.
2. The Governing Board determines that aforementioned brands shall be the Districtwide standards.

**PASSED AND ADOPTED** by the Governing Board of the Grossmont Union High School District at El Cajon, California, on this 15th day of \_\_\_\_\_, 2020, by the following vote:

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

STATE OF CALIFORNIA     )  
  )  
COUNTY OF SAN DIEGO    )

I, Jim Kelly, Clerk of the Governing Board of the Grossmont Union High School District of El Cajon, California, do hereby certify that the foregoing is a full, true and correct copy of a resolution adopted by said Board at the regular meeting thereof at the time and place of vote stated, which resolution is on file and of record in the office of said Board.

00124-00005/725777.2



# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

**SECTION 00740  
ESCROW AGREEMENT**

## ESCROW ACCOUNT INSTRUCTIONS

Establishment of an escrow account is optional. When using the option of having retentions deposited into an escrow account, please execute three (3) copies of the Escrow Account Forms. Once the Contractor and the Bank have signed the agreements, forward all three copies to:

Rian Pinson  
Director of Purchasing  
Grossmont Union High School District  
PO Box 1043  
La Mesa, CA 91944-1043

The Deputy Superintendent, Business Services will sign the three originals and will forward the Bank's and Contractor's copy to the Bank and Contractor and retain one for the District's records.

Contractor shall submit a **separate payment request** for retention. Payments will be forwarded directly to the bank for deposit to the escrow account.

**ESCROW RELEASE:** Upon completion of a project, please forward a letter requesting release of the Escrow Account funds to the above address or via email to [rpinson@guhdsd.net](mailto:rpinson@guhdsd.net). Include the following information in the letter:

1. Bank representative's name
2. Bank name
3. Address
4. Fax or email
5. Escrow Account Number

The District will send a request for release to the Bank following receipt of the Request to Release Escrow Funds letter and filing of the Notice of Completion.

(00740)  
**ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION**  
**CHILDCARE CENTER SHADE STRUCTURE PROJECT**  
**CN-3571**

This Escrow Agreement is made and entered into by and between the **GROSSMONT UNION HIGH SCHOOL DISTRICT** whose address is **1100 Murray Drive, El Cajon, CA 92020** (hereinafter \_\_\_\_\_ called "Owner") and

whose address is \_\_\_\_\_ (hereinafter called "Contractor")  
and \_\_\_\_\_ whose address is  
\_\_\_\_\_ (hereinafter called "Escrow Agent").

For the consideration hereinafter set forth, the Owner, Contractor, and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for the \_\_\_\_\_ in the amount of \_\_\_\_\_ dated \_\_\_\_\_ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the retention earnings directly to the Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of \_\_\_\_\_, and shall designate the Contractor as the beneficial Owner.

(2) The Owner shall make progress payments to the Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the Owner makes payment of retention earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until the time that the escrow created under this Escrow Agreement is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

(4) Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

(6) Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.

(7) The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven days written notice to the Escrow Agent from the Owner of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

(8) Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Escrow Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

Deputy Superintendent, Bus. Svcs.  
Title

Scott Patterson  
Name

\_\_\_\_\_  
Signature

1100 Murray Drive, El Cajon, CA 92020  
Address

On behalf of Escrow Agent:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

On behalf of Contractor:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Escrow Agreement.

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

**OWNER:**

**CONTRACTOR:**

**GROSSMONT UNION HIGH SCHOOL DIST.**

\_\_\_\_\_  
Deputy Superintendent, Bus. Svcs.  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Scott Patterson  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

**SECTION 00750  
CERTIFICATIONS TO BE  
SUBMITTED WITH BID**

**CERTIFICATION – PARTICIPATION OF DISABLED VETERAN BUSINESS  
ENTERPRISES IN ACCORDANCE WITH EDUCATION CODE SECTION 17076.11  
(00751)**

In accordance with Education Code section 17076.11, the Grossmont Union High School District (the “District”) has a participation goal for Disabled Veteran Business Enterprises (“DVBEs”) of at least three percent (3%) per year of the overall dollar amount of funds allocated to the District by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act of 1998 for construction or modernization of school buildings and expended each year by the District. Each Contractor submitting a bid will provide a statement to the District of anticipated participation of DVBEs in the contract. If the bidding Contractor is a DVBE, a copy of its DVBE Certification Letter must be provided to the District. Prior to, and as a condition precedent for final payment under the contract, the Contractor will provide appropriate documentation to the District identifying the amount paid to DVBEs pursuant to the contract, and a copy of the DVBE Certification Letter for each DVBE, so that the District can assess its success at meeting this goal.

The Contractor shall provide the anticipated participation of DVBEs by identifying (1) the name of each DVBE proposed for use in the contract, (2) the dollar amount and percentage each DVBE shall perform in comparison to the total contract dollar amount, and (3) a description of the tasks each DVBE will perform. (A recommended template form to provide this information is available as Appendix 1.) If there is a discrepancy between the anticipated goal and the actual goal at the completion of the contract or a failure to meet the anticipated goal or dollar amount, the District will require the Contractor to provide, at the completion of the contract, a detailed statement of the reason(s) for the discrepancy or failure to meet the anticipated goal or dollar amount.

I certify that I have read the above and will comply with the anticipated participation goal of DVBEs for this contract.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Company

\_\_\_\_\_  
Address

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Fax

\_\_\_\_\_  
E-Mail

## SUMMARY OF DISABLED VETERAN OWNED BUSINESS PARTICIPATION

COMPANY NAME	NATURE OF WORK	CONTRACTING WITH	TIER	CLAIMED DVBE VALUE \$	PERCENTAGE OF CONTRACT (%)	OSDS DVBE CERTIFICATION

I declare under penalty of perjury, under the laws of the State of California, that the information herein is true and correct to the best of my knowledge.

Executed on: \_\_\_\_\_, at \_\_\_\_\_ in the state of \_\_\_\_\_  
Date City

Signature of Contractor or Authorized Agent

Project Name

---

Project Number

---

Printed Name \_\_\_\_\_

Firm Name

---

Telephone



## **Attachment 1 - Instructions**

Complete the form providing the information as follows:

- (a) **Company Name** - list the name of the company proposed for DVBE participation. If the prime contractor is a DVBE, its name must also be listed to receive participation credit.
- (b) **Nature of Work** - identify the proposed work or service to be provided by the listed company.
- (c) **Contracting With** - list the name of the department or company with which the company listed is contracting.
- (d) **TIER** - the contracting tier should be indicated with the following level designations:
  - 0 = Prime contractor;
  - 1 = First tier subcontractor/supplier;
  - 2 = Second tier subcontractor/supplier of first tier subcontractor/ supplier;
  - 3 = Third tier subcontractor/supplier of second tier subcontractor/ supplier; etc.
- (e) **Claimed DVBE Value** - the total dollar amount of the value claimed by a disabled veteran business enterprise.
- (f) **Percentage of Contract** - compute the percentage (%) the claimed DVBE value is of the total contract dollar amount.
- (g) **DVBE Certification** - The bidder must include one copy of the DVBE certification letter from the Office of Small Business Services and DVBE Services Certification Programs for each DVBE firm listed on the Summary of Disabled Veteran Owned Business Participation.

(00752)  
**BIDDER'S ACKNOWLEDGEMENT  
OF PROJECT SCHEDULE AND PHASING**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

The undersigned acknowledges that he/she has carefully and thoroughly reviewed the Project Schedule and Phasing Plan, attached herein, and made a part of the Contract Documents.

The undersigned fully understands the manpower requirements necessary to complete the project in accordance with the Project Schedule and Phasing Plan, and agrees to furnish all labor, materials and equipment necessary, upon District acceptance of bidder's proposal, to fully comply with this schedule. The undersigned agrees to comply with any and all adjustments to schedule and phasing plan, as may be directed by the Construction Manager, and which may be required to ensure project completion as stipulated in the Contract Documents.

The undersigned acknowledges that failure to comply with the above could result in delays to other contractors, whose bona fide and substantiated cost impacts, due to said delays, may be borne by the undersigned.

ACKNOWLEDGED AND AGREED:

DATE: \_\_\_\_\_

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_  
Signature

(00753)  
SITE VISIT CERTIFICATION

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

I certify that I have visited the site of the proposed work and have fully acquainted myself 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 under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

I fully indemnify the Grossmont Union High School District, the Architect, the 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 to the site.

\_\_\_\_\_  
(Signature of Bidder)

\_\_\_\_\_  
(Typed name of Bidder)

SUBSCRIBED BEFORE ME on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Notary Public)

My commission expires: \_\_\_\_\_

**(00754)**  
**ACKNOWLEDGEMENT OF BIDDING PRACTICES**  
**REGARDING INDEMNITY**

TO: Grossmont Union High School District  
1100 Murray Drive  
El Cajon, California 92020

RE: **CHILDCARE CENTER SHADE STRUCTURE PROJECT**  
**CN-3571**

Please be advised that with respect to the above-referenced PROJECT the undersigned CONTRACTOR on behalf of itself and all subcontractors hereby waives the benefits and protection of Labor Code section 3864, which provides:

“If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury.”

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the DISTRICT of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

\_\_\_\_ ACKNOWLEDGED AND AGREED:

DATE: \_\_\_\_\_

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_  
Signature

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

**SECTION 00755  
CERTIFICATIONS TO BE  
SUBMITTED WITH  
AGREEMENT**

**CONTRACTOR'S CERTIFICATE  
REGARDING DRUG-FREE WORKPLACE**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code sections 8350 et. seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by performing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the CONTRACTOR or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

Pursuant to Government Code section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- a) Publishing a statement, notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace, and specifying actions which will be taken against employees for violations of the prohibition;
- b) Establishing a drug-free awareness program to inform employees about all of the following:
  - 1) The dangers of drug abuse in the workplace;
  - 2) The person's or organization's policy of maintaining a drug-free workplace;
  - 3) The availability of drug counseling, rehabilitation and employee-assistance programs; and
  - 4) The penalties that may be imposed upon employees for drug abuse violations;
- c) Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will (a) publish a statement notifying employees concerning the prohibition of controlled substance at the workplace, (b) establish a drug-free awareness program, and (c) require each employee engaged in the performance of the contract be given a copy of the statement required by section 8355(a) and require such employee agree to abide by the terms of that statement.

I also understand that if the DISTRICT determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of section 8355, that the contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of sections 8350 et. seq.

I acknowledge that I am aware of the provisions of Government Code sections 8350 et. seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_  
Signature

**CONTRACTOR'S CERTIFICATE REGARDING  
ALCOHOLIC BEVERAGE AND TOBACCO-FREE CAMPUS POLICY**

**CHILDCARE CENTER SHADE STRUCTURE PROJECT  
CN-3571**

The CONTRACTOR agrees that it will abide by and implement the DISTRICT's Alcoholic Beverage and Tobacco-Free Campus Policy, which prohibits the use of alcoholic beverages and tobacco products, at any time, on DISTRICT-owned or leased buildings, on DISTRICT property and in DISTRICT vehicles. The CONTRACTOR shall procure signs stating "ALCOHOLIC BEVERAGE AND TOBACCO USE IS PROHIBITED" and shall ensure that these signs are prominently displayed in all entrances to school property at all times.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_  
Signature



## ASBESTOS-FREE MATERIALS CERTIFICATION

The undersigned declares that he or she is the person who executed the bid for [CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571](#) (Hereinafter referred to as the "Project", and submitted it to the GROSSMONT UNION HIGH SCHOOL DISTRICT (hereinafter referred to as the "Owner" on behalf of \_\_\_\_\_ (hereinafter referred to as the "Contractor").

To the best of my knowledge, information and belief, in completing the Contractor's Work for the Project, no material furnished, installed or incorporated into the Project will contain, or in itself be composed of, any materials listed by the federal or state EPA or federal or state health agencies as a hazardous material.

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

Executed on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_\_ at \_\_\_\_\_.

—

\_\_\_\_\_  
Name of Contractor (Print or Type)

By: \_\_\_\_\_  
Signature

*JURAT*

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

State of California  
County of \_\_\_\_\_

Subscribed and sworn to (or affirmed) before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
by \_\_\_\_\_, proved to me on the basis of satisfactory evidence to be the  
person(s) who appeared before me.

\_\_\_\_\_  
Notary Public in and for  
the State of California

Seal

My Commission Expires: \_\_\_\_\_

## CONTRACTOR FINGERPRINTING REQUIREMENTS

### CONTRACTOR CERTIFICATION

# CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571

With respect to the Contract dated \_\_\_\_\_ 20\_\_\_\_, by and between the Grossmont Union High School District ("Owner") and \_\_\_\_\_ ("Contractor"), Contractor hereby certifies to the Owner's governing board that it has completed the criminal background check requirements of Education Code Section 45125.1 and that none of its employees that may come in contact with Owner's pupils have been convicted of a violent felony listed in Penal Code section 667.5(c) or a serious felony listed in Penal Code section 1192.7(c).

\_\_\_\_\_  
Signature of Contractor's Representative

\_\_\_\_\_  
Date

- OR -

### CONTRACTOR EXEMPTION

Pursuant to Education Code sections 45125.1 and 45125.2, the Grossmont Union High School District ("Owner") has determined that \_\_\_\_\_ ("Contractor") is exempt from the criminal background check certification requirements for the contract dated \_\_\_\_\_, 20\_\_\_\_ by and between the Owner and Contractor ("Contract") because:

- ☐ The Contractor's employees will have limited contact with Owner students during the course of the Contract;
- ☐ Emergency or exceptional circumstances exist; or
- ☒ With respect to contractors constructing, reconstructing, rehabilitating or repairing a school facility, as provided in Section 45125.2, the Contractor has agreed to ensure the safety of pupils at the school facility by the following method(s) specified in Section 45125.2:

\_\_\_\_\_ Installation of physical barrier at the work site to limit contact with pupils.  
\_\_\_\_\_ Surveillance of employees of the Contractor by school personnel.  
  X   Continual supervision and monitoring of all employees of the Contractor by an employee of the Contractor whom the DOJ has ascertained has not been convicted of a violent or serious felony.

Supervisor's Name: \_\_\_\_\_

Soc.Sec. No. (last 4 digits) or CDL \_\_\_\_\_

## SUBCONTRACTOR'S CERTIFICATION

### CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571

The Grossmont Union High School District ("Owner") entered into a contract for services with \_\_\_\_\_ ("Contractor") on or about \_\_\_\_\_, 20\_\_\_\_ ("Contract"). This certification is submitted by \_\_\_\_\_, a subcontractor to the Contractor for purposes of that Contract ("Subcontractor"). Subcontractor hereby certifies to the Owner's governing board that it has completed the criminal background check requirements of Education Code section 45125.1 and that none of its employees that may come in contact with Owner pupils have been convicted of a violent felony listed in Penal Code section 667.5(c) or a serious felony listed in Penal Code section 1192.7(c).

Signature of Contractor's Representative

Date

- OR -

## SUBCONTRACTOR'S EXEMPTION

The Grossmont Union High School District ("Owner") entered into a contract for services with \_\_\_\_\_ ("Contractor") on or about \_\_\_\_\_, 20\_\_\_\_. ("Contract"). Pursuant to Education Code sections 45125.1 and 45125.2, the Owner has determined that \_\_\_\_\_, a subcontractor to the Contractor for purposes of that Contract ("Subcontractor"), is exempt from the criminal background check certification requirements for the Contract because:

- ☐ The Subcontractor's employees will have limited contact with Owner students during the course of the Contract;
- ☐ Emergency or exceptional circumstances exist; or
- ☒ With respect to contractors constructing, reconstructing, rehabilitating or repairing a school facility, as provided in Section 45125.2, the Contractor and/or Subcontractor have agreed to ensure the safety of pupils at the school facility by the following method(s) specified in Section 45125.2:

\_\_\_\_\_ Installation of physical barrier at the work site to limit contact with pupils.  
\_\_\_\_\_ Surveillance of employees of the Contractor by school personnel.  
  X   Continual supervision and monitoring of all employees of the Contractor by an employee of the Contractor whom the DOJ has ascertained has not been convicted of a violent or serious felony.

Supervisor's Name: \_\_\_\_\_

Soc.Sec. No. (last 4 digits) or CDL \_\_\_\_\_



---

## FINGERPRINTING & BADGING PROCEDURES

### Attachment "A"

All Contractors/Consultants shall be badged for all work and projects on our school sites. See Ed Code 45125 for any details. The District does not provide fingerprinting services, only badging.

#### **Fingerprinting**

All LiveScan offices require an ORI number to obtain FBI Background Checks and DOJ clearances. Any person who is to be fingerprinted must be able to provide the Request for LiveScan Form, ORI number, their name, valid California identification such as a driver's license (out-of-state ID requires a Social Security Card). Contractors may use any LiveScan office to process their employees' fingerprints.

Contracting companies may obtain an ORI number by completing the process to become an applicant agency. Information is available at the Department of Justice website: <https://oag.ca.gov/fingerprints/agencies>. Note this process may take from 4 – 6 weeks or longer.

#### **Construction Contractor Badge Procedures**

Badges shall be obtained from the Facilities Department - Bond Office, Monday through Friday from 8:00 – 3:00.

- **Unrestricted Badges:** Upon obtaining DOJ and FBI clearance, the Contractor shall provide the District and the Construction Manager (for CM projects) a written, employer-certified list of DOJ/ FBI CLEARED employees on company letterhead. A GREEN badge with picture will be issued showing UNRESTRICTED status.
- **Restricted Badges:** Contractor shall also provide a list of employees on company letterhead that have NOT been fingerprinted. A RED badge with picture will be issued showing RESTRICTED status. These employees must be overseen at all times by a GREEN badge employee.
- **Contractor Employees:** Contractor employee on site less than 7 days per project will be issued local badge by CM or general contractor and will be under supervision of a GREEN badge employee at all times.

The lists shall include:

- Employee first and last name
- California Identification Card or Driver's License number OR the last four digits of the employee's Social Security Number.

Badges should be obtained at least five (5) working days prior to start of work.

Contractor **SHALL NOT** permit any employee who does not have a badge to enter school premises or be on any Grossmont Union High School District jobsite. Submission of a list of DOJ cleared employees shall constitute acknowledgment by the Contractor that the employees listed are eligible to provide supervision services for non-cleared employees on a school site campus.

Sample certification and badge request letters can be requested.

Fingerprinting and Department of Justice clearance is the responsibility of the awarded contractor as noted in the Fingerprinting Certifications submitted with your bid documents. Questions regarding the application for an ORI number can be referred to the Dept. of Justice, [AuthorizationQuestions@doj.ca.gov](mailto:AuthorizationQuestions@doj.ca.gov).

Call Shelley La Fata at (619) 644-8159 if you need assistance in badging.

# **GROSSMONT UNION HIGH SCHOOL DISTRICT**

## **CHILDCARE CENTER SHADE STRUCTURE PROJECT CN-3571**

### **ATTACHMENT C TECHNICAL SPECIFICATIONS**

## TECHNICAL SPECIFICATIONS

**Location:** CDC

**Project Manual:** Project manual published separately.

**Scope of Work:** As per the following trade categories.

## GROSSMONT UNION HIGH SCHOOL DISTRICT

This substitution request form may be used for Pre-Bid Substitution Requests or Post-Bid Substitution Requests.

TO: \_\_\_\_\_

PROJECT: \_\_\_\_\_

### SPECIFICATION ITEM:

Section	Page	Paragraph	Description
---------	------	-----------	-------------

Substitution approval is an acceptance of only the manufacturer and product for general conformance with the design concept reflected in the Contract Documents. The A/E has made no attempt to verify specific performance data, or to check the details of the proposed substitution as to special features, capacities, physical dimensions or code and/or regulatory compliance, all of which remain the responsibility of the person/entity submitting the proposed substitution.

### The undersigned requests consideration of the following:

#### PROPOSED SUBSTITUTION:

Attached data includes product description, specifications, drawings, photographs, performance and test data, adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

#### The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. The proposed substitution does not affect dimensions shown on the Drawings.
2. The undersigned will pay for changes to the building design, including engineering design, detailing, and construction
3. costs caused by the requested substitution.
4. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty
5. requirements.
6. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further certifies that the function, appearance, and quality of the proposed substitution are *equivalent or superior* to the specified item.

The undersigned agrees that, if this page is reproduced, the terms and conditions for substitutions found in the Bidding Documents apply to this request.

SUBMITTED ON \_\_\_\_\_, \_\_\_\_\_ BY:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip Code

#### For Use by Design Consultant:

- ☐ Accepted
- ☐ Accepted as Noted
- ☐ Not Accepted
- ☐ Submitted Late

By: \_\_\_\_\_

Date: \_\_\_\_\_





PROJECT MANUAL

## CHILDCARE CENTER SHADE STRUCTURE

GROSSMONT UNION HIGH SCHOOL DISTRICT

EL CAJON, CA

CONSTRUCTION DOCUMENTS

VOLUME 1 OF 1      Divisions 00 - 31

DSA Application #04 - 121137

File #37-H4

1.30.65

August 2022



**SECTION 00 01 01**  
**PROJECT TITLE PAGE**

**CHILDCARE CENTER SHADE STRUCTURE**

**DISTRICT**

**GROSSMONT UNION HIGH SCHOOL DISTRICT**

**1100 MURRAY DRIVE, EL CAJON CA 91944**

**WWW.GUHSD.NET**

**PROJECT LOCATION**

**GROSSMONT HIGH SCHOOL**

**1100 MURRAY DRIVE**

**EL CAJON, CALIFORNIA 92020**

**PREPARED BY:**

**ARCHITECT**

**RUHNAU CLARK ARCHITECTS**

3775 Tenth Street, Riverside California 92501 - 5751 Palmer Way, Suite C, Carlsbad California 92010

951.684.4664 - 760.438.5899

[www.ruhnaucclarke.com](http://www.ruhnaucclarke.com)

Architect's Project Number: 1-30-65.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Title Page 00 01 01 - 1
--	--	------------------------------------

NOTICE: This Project Manual, is an unpublished instrument of service of the authors. It is prepared for use only on this Project and in conjunction with the authors' interpretations, observations, decisions and administration, as described in the Conditions of the Contract. Desired results without these services cannot be assured. Use in whole or in part, without the authors' services and expressed written consent may violate Act 17 U.S.C. par. 301 (1991).

## END OF PROJECT TITLE PAGE

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Title Page 00 01 01 - 2
--	--	------------------------------------

**SECTION 00 01 02  
PROJECT INFORMATION**

**PART 1 GENERAL**

**1.01 PROJECT IDENTIFICATION**

- A. Project Name: Childcare Center Shade Structure, located at:  
Project Number: 1-30-65.  
Grossmont High School.  
1100 Murray Drive.  
El Cajon, California 92020.
- B. The Owner, hereinafter referred to as District: Grossmont Union High School District  
**Grossmont Union High School District**  
1100 Murray Drive, El Cajon CA 91944  
www.guhds.net  
619.644.8000

**1.02 NOTICE TO PROSPECTIVE BIDDERS**

- A. These documents constitute an Invitation to Bid to and request for qualifications from General Contractors for the construction of the project described below.

**1.03 PROJECT DESCRIPTION**

- A. Summary Project Description: a new fabric shade structure.  
B. Contract Scope: Construction, demolition, and renovation.  
C. Contract Terms: Lump sum (fixed price, stipulated sum).

**1.04 PROJECT CONSULTANTS**

- A. The Architect, hereinafter referred to as Architect: **Ruhnau Clark Architects**  
3775 Tenth Street, Riverside California 92501 - 5751 Palmer Way, Suite C, Carlsbad  
California 92010  
www.ruhnauclarke.com  
951.684.4664 - 760.438.5899

**1.05 PROCUREMENT TIMETABLE**

- A. Last Request for Substitution Due: 14 days prior to due date of bids.  
B. Last Request for Information Due: 14 days prior to due date of bids.  
C. Contract Time: To be stated in bid documents.  
D. The District reserves the right to change the schedule or terminate the entire procurement process at any time.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Information 00 01 02 - 1
--	--	-------------------------------------

#### **1.06 PROCUREMENT DOCUMENTS**

- A. Availability of Documents: Complete sets of procurement documents may be obtained:
1. From District at the Project Manager's address listed above.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Information 00 01 02 - 2
--	--	-------------------------------------

SECTION 00 01 07  
SEALS PAGE

ARCHITECT OF RECORD (AOR)

**RUHNAU CLARK ARCHITECTS**

3775 Tenth Street, Riverside California 92501 - 5751 Palmer Way, Suite C, Carlsbad California 92010

Roger Clarke, Architect of Record      C-21340



END OF SEALS PAGE

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT

APP: 04-121137 INC:

REVIEWED FOR

SS ☒ FLS ☒ ACS ☒

DATE: 08/31/2022

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Seals Page 00 01 07 - 1
--	--	----------------------------

**SECTION 00 01 10  
TABLE OF CONTENTS**

**PROCUREMENT AND CONTRACTING REQUIREMENTS**

**DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS**

- 00 01 01 - Project Title Page
- 00 01 02 - Project Information
- 00 01 07 - Seals Page
- 00 01 10 - Table of Contents
- 00 40 25 - Request for Information
- 00 43 25 - Substitution Request Form - During Procurement
- 00 63 25 - Substitution Request Form - During Construction

**SPECIFICATIONS**

**DIVISION 01 -- GENERAL REQUIREMENTS**

- 01 10 00 - Summary
- 01 20 00 - Price and Payment Procedures
- 01 25 00 - Substitution Procedures
- 01 30 00 - Administrative Requirements
  - 01 30 00.01 - Request for Interpretation
  - 01 30 00.02 - Submittal Transmittal
- 01 35 50 - Requests for Electronic Files
- 01 35 53 - Security Procedures
- 01 40 00 - Quality Requirements
- 01 41 00 - Regulatory Requirements
- 01 45 33 - Code-Required Special Inspections
- 01 50 00 - Temporary Facilities and Controls
- 01 60 00 - Product Requirements
- 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions
  - 01 61 16.01 - Accessory Material VOC Content Certification Form
- 01 70 00 - Execution and Closeout Requirements
- 01 71 23 - Field Engineering
- 01 74 19 - Construction Waste Management and Disposal
- 01 78 00 - Closeout Submittals
  - 01 78 00.01-Warranty Form Letter

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Table of Contents 00 01 10 - 1
--	--	-----------------------------------



01 78 39 - Project Record Documents

**DIVISION 02 -- EXISTING CONDITIONS**

02 41 00 - Demolition

**DIVISION 03 -- CONCRETE**

03 30 00 - Cast-in-Place Concrete

**DIVISION 05 -- METALS**

05 50 00 - Metal Fabrications

**DIVISION 13 -- SPECIAL CONSTRUCTION**

13 31 33 - Pre-Engineered Fabric Shade Structures

**DIVISION 31 -- EARTHWORK**

31 23 16 - Excavation

31 23 23 - Fill

31 63 29 - Drilled Concrete Piers and Shafts

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Table of Contents 00 01 10 - 2
--	--	-----------------------------------

**SECTION 00 40 25  
REQUEST FOR INFORMATION**

**RFI NUMBER:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PROJECT NAME:** CHILDCARE CENTER SHADE STRUCTURE

**PROJECT NO.:** 1-30-65

**TO:** **RUHNAU CLARK ARCHITECTS**

. Construction Manager

Attention: \_\_\_\_\_

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Request By: \_\_\_\_\_

Date: \_\_\_\_\_

**BRIEF SUMMARY OF RFI:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Drawing No. \_\_\_\_\_ Detail No. \_\_\_\_\_

Specification Section \_\_\_\_\_ Title \_\_\_\_\_

. Page \_\_\_\_\_ Paragraph \_\_\_\_\_

**DETAILS OF THIS RFI:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attachments: \_\_\_\_\_

\_\_\_\_\_

**RESPONSE WILL BE INCLUDED IN AN ADDENDUM**

**END OF RFI**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Request for Information 00 40 25 - 2
--	--	---

**SECTION 00 43 25**  
**SUBSTITUTION REQUEST FORM - DURING PROCUREMENT**

**SUBSTITUTION REQUEST NO.** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PROJECT NAME: CHILDCARE CENTER SHADE STRUCTURE**

**PROJECT NUMBER: 1-30-65**

**TO: RUHNAU CLARK ARCHITECTS**

Construction Manager

From: \_\_\_\_\_

We hereby submit for your consideration the following product comparisons of the specified product and the proposed substitution. The undersigned fully understands that failure to answer any item below may be cause for rejection of request for substitution.

Request for substitution shall only be made during bidding (not later than 7 days prior to bid opening for inclusion by Addendum) except under conditions beyond control of Contractor.

**SPECIFIED PRODUCT:** \_\_\_\_\_

Project Manual Section Title \_\_\_\_\_ Number \_\_\_\_ Page \_\_\_\_ Paragraph \_\_\_\_.

Drawing No. \_\_\_\_\_ Detail No. \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Tel: \_\_\_\_\_

A. Is the point-by-point comparative data attached? — REQUIRED BY A/E

B. Reason request for substitution is being submitted: \_\_\_\_\_

**DIFFERENCES BETWEEN PROPOSED SUBSTITUTION AND SPECIFIED PRODUCT**

C. Does proposed substitution affect in any way the Structural Safety, Access Compliance, or Fire & Life Safety portions of the project? No\_\_ Yes\_\_

Explain \_\_\_\_\_

D. Does proposed substitution affect dimensions, gages, weights, etc. on Drawing? No\_\_ Yes\_\_

Explain \_\_\_\_\_

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Request Form - During Procurement 00 43 25 - 1
--	--	---

- E. Does proposed substitution require changes in Drawings or design and installation changes?  
No\_\_\_ Yes\_\_\_ \_\_\_\_\_  
(If yes, cost of these changes is the responsibility of the Contractor.)
- F. Does proposed substitution affect product cost, delivery time, or construction schedule?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_
- G. Does proposed substitution comply with specified ICC Number, UL Rating, ASTM Numbers?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_
- H. Does proposed substitution affect other trades and systems such as wiring, piping, ductwork, structure, etc.? No \_\_\_ Yes \_\_\_ (Explain which and how) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- I. Does proposed substitution product guarantee differ from that of the specified product?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attach a listing of 3 similar projects (one in service for at least 3 years) using the proposed substitution.

Substantiating Data: Attach product data/brochures and Vendor qualifications for both specified and substitute product. Provide samples for both specified and substitute products, if applicable.

Certification: Undersigned has examined Construction Documents, is familiar with specified product, understands indicated application of product, and understands design intent of the Architect caused by the requested substitution.

Submitted by: \_\_\_\_\_

\_\_\_\_\_. (Type Name)      Signature      Date

Signature must be made by person having legal authority to bind his firm to the above terms.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Request Form - During Procurement 00 43 25 - 2
--	--	---

**SECTION 00 63 25**  
**SUBSTITUTION REQUEST FORM - DURING CONSTRUCTION**

**SUBSTITUTION REQUEST NO.** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PROJECT NAME: CHILDCARE CENTER SHADE STRUCTURE**

**PROJECT NUMBER: 1-30-65**

**TO: RUHNAU CLARK ARCHITECTS**  
Construction Manager

From: \_\_\_\_\_

We hereby submit for your consideration the following product comparisons of the specified product and the proposed substitution. The undersigned fully understands that failure to answer any item below may be cause for rejection of request for substitution.

This request for substitution form shall only be used after the end of the bidding period except under conditions beyond control of Contractor.

Specified Product: \_\_\_\_\_

Project Manual Section Title \_\_\_\_\_ Number \_\_\_\_ Page \_\_\_\_ Paragraph \_\_\_\_.

Drawing No. \_\_\_\_\_ Detail No. \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Tel: \_\_\_\_\_

A. Reason request for substitution is being submitted: \_\_\_\_\_

\_\_\_\_\_

B. Does proposed substitution affect in any way the Structural Safety, Access Compliance, or Fire & Life Safety portions of the project? No\_\_ Yes\_\_

Explain \_\_\_\_\_

\_\_\_\_\_

C. Does proposed substitution affect dimensions, gages, weights, etc. on Drawing? No\_\_ Yes\_\_

Explain \_\_\_\_\_

\_\_\_\_\_

D. Does proposed substitution require changes in Drawings or design and installation changes?

No\_\_ Yes\_\_ \_\_\_\_\_

(If yes, cost of Architect and Engineer document changes are the responsibility of the

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Request Form - During Construction 00 63 25 - 1
--	--	--

Contractor.)

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Request Form - During Construction 00 63 25 - 2
--	--	--

- E. Does proposed substitution affect product cost, delivery time, or construction schedule?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_
- F. Does proposed substitution comply with specified ICC Number, UL Rating, ASTM Numbers?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_
- G. Does proposed substitution affect other trades and systems such as wiring, piping, ductwork, structure, etc.? No \_\_\_ Yes \_\_\_ (Explain which and how) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If yes, has impact on their work been included in price of proposed substitution? No\_\_\_ Yes\_\_\_.

- H. Does proposed substitution product guarantee differ from that of the specified product?  
No\_\_\_ Yes\_\_\_ Explain \_\_\_\_\_

\_\_\_\_\_

If the substitution request is accepted, it will result in:

No cost impact \_\_\_\_\_ Improve Schedule \_\_\_\_\_ Credit of \$ \_\_\_\_\_

Attach a listing of 3 projects (one in service for at least 3 years) using the proposed substitution.

Substantiating Data: Attach product data/brochures and Vendor qualifications for both specified and substitute product. Provide samples for both specified and substitute products, if applicable.

Certification: Undersigned has examined Construction Documents, is familiar with specified product, understands indicated application of product, and understands design intent of the Architect caused by the requested substitution.

Submitted by: \_\_\_\_\_

\_\_\_\_\_. (Type Name)      Signature      Date

Signature must be made by person having legal authority to bind his firm to the above terms.

Architect's Comments:

\_\_\_\_\_ Accepted, \_\_\_\_\_ accepted as noted, \_\_\_\_\_ not accepted, \_\_\_\_\_ received too late.

Reviewed by:

\_\_\_\_\_  
Architect      Date

\_\_\_\_\_  
DSA      Date

\_\_\_\_\_  
District      Date

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Request Form - During Construction 00 63 25 - 3
--	--	--



## **SECTION 01 10 00 SUMMARY**

### **PART 1 GENERAL**

#### **1.01 PROJECT**

- A. Project Name: Childcare Center Shade Structure
- B. District's Name: Grossmont Union High School District.
- C. Architect's Name: Ruhnau Clark Architects.
- D. The Project consists of the construction of a fabric shade shelter located at Grossmont High School.

#### **1.02 CONTRACT DESCRIPTION**

- A. Contract Type: Multiple prime contracts each based on a Stipulated Price as described in Owner-Contractor Agreement.
- B. The Work is construction and related services for a , CBC, Occupancy Type Educational Group E, Construction Type V-B, , totaling enclosed approximately 0 square feet.
  - 1. Hazardous Material Abatement is specified in a separate document prepared by the District's Consultant and is not managed by the Architect or the Architect's Consultants.

#### **1.03 CONTRACT DOCUMENTS**

- A. Contract Requirements:
  - 1. Conditions of the Contract and other Contract documents have been included in the Project Manual, as indicated in the Table of Contents.
    - a. Such documents are not Specifications.
  - 2. Specifications are found in the technical Divisions of the Project Manual.
- B. Contract Drawings: The Drawings provided with and identified in the Project Manual are the Drawings referenced in the Agreement.
  - 1. The location, extent and configuration of the required construction and improvements are shown and noted on Drawings.
    - a. The Drawings are referenced in the Agreement.
    - b. An index of Drawings is included in the set of Drawings.
  - 2. Drawings are arranged into series according to design discipline. Such organization and all references to trades, subcontractor, specialty contractor or supplier shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of the Work to be performed by any trade.
  - 3. Where the terms "as shown", "as indicated", "as noted", "as detailed", "as scheduled", or terms of like meaning, are used in the Drawings or Specifications, it shall be understood that reference is being made to the Drawings referenced in the Agreement.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Summary 01 10 00 - 1
--	--	-------------------------

4. Where reference to the word "plans" is made anywhere in Drawings, Specifications and related Contract Documents, it shall be understood to mean the Drawings referenced in the Agreement.
- C. Contract Specifications: The Specifications provided in the Project Manual are the Specifications referenced in the Agreement.
  1. Specifications are organized by Divisions and Sections in accordance with the recommended practices of the Construction Specifications Institute.
    - a. Such organization shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of Work to be performed by any trade.
  2. Specifications are included in the Project Manual, which may also include other Bidding and Contract Documents.
    - a. Contents of the Project Manual are listed in Document 00 01 10 - Table of Contents, in the Project Manual.

#### **1.04 WORK BY OWNER**

- A. Concurrent Work Under Separate Contracts:
  1. Work Under Separate Contracts: District will award separate contracts for products and installation for interior improvements and other work as may be indicated on Drawings as NIC (Not in Contract).
  2. Relationship to Work Under the Contract:
    - a. Work under the Contract shall include all provisions necessary to make such concurrent work under separate contracts complete in every respect and fully functional, including field finishing.
    - b. Provide necessary backing, supports, piping, conduit, conductors and other such provisions from point of service to point of connection, as shown on Drawings and specified herein.
  3. Related Contract Documents:
    - a. District will make available, in a timely manner, drawings and specifications of work under separate contracts for coordination and further description of that work.
    - b. Such drawings and other data required for the coordination of the work of separate contracts with the Work of this Contract may be included with the Contract Documents.
    - c. If so, they are provided for convenience only and are not to be considered Contract Documents produced by Architect or Architect's consultants.
  4. Permits, Notices and Fees:
    - a. Permits, Notices and Fees: Notices required by and approvals required of authorities having jurisdiction for work under separate contracts and related fees will be solely the responsibility of District.
- B. Items noted NIC (Not in Contract) will be supplied and installed by District before Date of Final Inspection. Some items include:
  1. Movable cabinets.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Summary 01 10 00 - 2
--	--	-------------------------

2. Furnishings.
  3. Small equipment.
  4. Rugs.
  5. Artwork.
- C. OFCI - District will supply the following for installation by Contractor:
1. District may furnish, for installation by Contractor, products which are identified on the Drawings and in the Specifications as OFCI (Owner-Furnished/Contractor-Installed).
  2. Relationship to Work Under the Contract:
    - a. Work under the Contract shall include all provisions necessary to fully incorporate such products into the Work, including, as necessary.
      - 1) Fasteners.
      - 2) Backing,.
      - 3) Supports.
      - 4) Piping.
      - 5) Conduit.
      - 6) Conductors.
      - 7) Other such provisions from point of service to point of connection, for a complete installation.
      - 8) Field finishing, as shown on Drawings and specified herein.
    - b. See Section 01 30 00 - Administrative Requirements for additional requirements.

#### **1.05 PERMITS, LICENSES AND FEES**

- A. Permits:
1. For Work included in the Contract, Contractor shall obtain all permits from authorities having jurisdiction and from serving utility companies and agencies.
  2. District will reimburse Contractor for amount charged for such permits, without mark-up.
  3. For Work performed under design/build basis, plan check and permit fees shall be included in the Contract Sum.
- B. Licenses:
1. Contractor shall obtain and pay all licenses associated with construction activities, such as business licenses, contractors' licenses and vehicle and equipment licenses.
  2. All costs for licenses shall be included in the Contract Sum.
- C. Assessments:
1. District will pay all assessments and utility service connection fees. Costs of assessments shall not be included in the Contract Sum.
- D. Test and Inspection Fees:
1. Contractor shall pay all fees charged by authorities having jurisdiction and from serving utility companies and agencies, for tests and inspections conducted by those authorities,

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Summary 01 10 00 - 3
--	--	-------------------------

companies and agencies.

2. District will reimburse Contractor for actual amount of such fees, without mark-up.
3. Refer to Section 01 40 00 - Quality Requirements for additional information on tests and inspections and responsibility for payment of fees.

#### **1.06 OWNER OCCUPANCY**

- A. District intends to continue to occupy adjacent portions of the existing site during the entire construction period.
- B. District intends to occupy the Project by the date stated in the Agreement as the contract completion date.
- C. Cooperate with District to minimize conflict and to facilitate District's operations.
- D. Schedule the Work to accommodate District occupancy.

#### **1.07 CONTRACTOR USE OF SITE AND PREMISES**

- A. Construction Operations: Limited to areas noted on Drawings.
- B. Arrange use of site and premises to allow:
  1. District occupancy.
  2. Work by Others.
  3. Work by District.
  4. Use of site and premises by the public.
- C. Provide access to and from site as required by law and by District:
  1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
  2. Site Access:
    - a. Limit access to site to indicated routes and access points as indicated.
    - b. If routes and access points are not indicated, access shall be as approved by District.
    - c. Do not restrict access to adjacent properties and do not restrict access for those performing work under separate contracts for the District.
  3. Do not obstruct roadways, sidewalks, or other public ways without permit.
  4. Construction Limit:
    - a. Limit construction activities to areas indicated on Drawings as Project Area or, if not indicated, to areas within the parcel as described in the legal description on the Drawings.
    - b. Refer also to Section 01 50 00 - Temporary Construction Facilities and Controls for additional requirements.
- D. Existing building spaces may not be used for storage.
- E. Time Restrictions:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Summary 01 10 00 - 4
--	--	-------------------------

1. Limit conduct of especially noisy, malodorous, and dusty exterior work to the hours of 8 AM to 6 PM.
- F. Utility Outages and Shutdown:
1. Limit disruption of utility services to hours the site is unoccupied.
  2. Do not disrupt or shut down life safety systems, including but not limited to fire sprinklers and fire alarm system, without 7 days notice to District and authorities having jurisdiction.
  3. Prevent accidental disruption of utility services to other facilities.

#### **1.08 CONSTRUCTION WASTE MANAGEMENT**

- A. Construction and waste management, complying with Section 01 74 19 - Construction Waste Management and Disposal, is a requirement for this project.
- B. The Contractor, Prime Contractors, and subcontractors all have obligations in meeting the requirements of this specification.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Summary 01 10 00 - 5
--	--	-------------------------

**SECTION 01 20 00  
PRICE AND PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for progress payments.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Correlation of Contractor submittals based on changes.
- E. Procedures for preparation and submittal of application for final payment.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 78 00 - Closeout Submittals: Project record documents.

**1.03 SCHEDULE OF VALUES**

- A. Use Schedule of Values Form: Form provided by District.
- B. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit draft to Architect for approval.
- C. Submit Schedule of Values in duplicate within 15 days after date established in Notice to Proceed.
  - 1. Submit schedule in a spreadsheet calculated format, such as Excel, based upon the attached Schedule of Values augmented by the Table of Contents of this Project Manual.
- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the major specification section. Identify site mobilization, bonds and insurance, and record drawings .
- E. Where work is separated into phases requiring separately phased payments, provide separate schedule for each phase.
- F. Where work involves multiple sites and/or "A" number, provide separate schedules for each site and/or "A" number.
- G. Where scope of work involves multiples buildings/structures, provide separate schedule for each building.
- H. Include in each line item, the amount of Allowances specified in this section.
- I. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- J. Revise schedule to list approved Change Orders, with each Application For Payment.
  - 1. List each authorized Change Order as an extension on the continuation sheet, listing the Change Order number and dollar value as for an original portion of Work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 1
--	--	--

#### 1.04 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
  - 1. Substantiating information will normally be required only for those portions of Work whose completion state cannot be readily determined by observation of the completed Work.
- B. Use Form Form as provided by District.
- C. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- D. Forms filled out by hand will not be accepted.
- E. For each item, provide a column for listing each of the following:
  - 1. Item Number.
  - 2. Description of work.
  - 3. Scheduled Values.
  - 4. Previous Applications.
  - 5. Work in Place and Stored Materials under this Application.
  - 6. Authorized Change Orders.
  - 7. Total Completed and Stored to Date of Application.
  - 8. Balance to Finish.
  - 9. Retainage.
- F. Execute certification by signature of authorized officer.
- G. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored products.
- H. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of work.
  - 1. No Change Orders shall be included with Application for Payment until approved in writing by District and Architect. Also approved by DSA when appropriate.
- I. Submit one electronic and three hard-copies of each Application for Payment.
- J. Include the following with the application:
  - 1. Transmittal letter as specified for submittals in Section 01 30 00.
  - 2. Construction progress schedule, revised and current as specified in Section 01 30 00.
  - 3. Current construction photographs specified in Section 01 30 00.
  - 4. Partial release of liens from major subcontractors and vendors.
    - a. Provide with each Application for Payment lien releases from all subcontractors, workers and materials suppliers employed for the Project covering their portion of Work to date for which payment application is made. Lien release forms will be provided by District and shall be completed in accordance with directions provided.
  - 5. Project record documents as specified in Section 01 78 00, for review by District which will be returned to the Contractor.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 2
--	--	--

6. Affidavits attesting to off-site stored products.
- K. When Architect requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

#### **1.05 ADDENDA**

- A. Addenda are changes issued prior to the signing of the Contract for Construction. These Addenda shall be signed by the Architect and approved by the (Project City).
- B. These documents may or may not have approved by the (Project City) prior to the close of Bid.
  1. If not approved by DSA prior to close of the bidding period, the contract price shall include the Addenda.
  2. No work shall proceed regarding any Addendum until approved by DSA.
  3. Revisions to Addenda, when approved by DSA, shall be incorporated by an additional addendum or Change Order as indicated below and as provided for in the Contract for Construction and General Conditions.

#### **1.06 MODIFICATION PROCEDURES**

- A. Construction Changes, General:
  1. The following describe administrative procedures to be followed in compliance with provisions of the Conditions of the Contract for Architect's Supplemental Instructions, Construction Change Directives, Construction Change Documents, and Contract Change Orders.
  2. The Architect will prepare and issue: Architect's Supplemental Instructions, a Construction Change Directive or a Request for Proposal to be presented to the Contractor for action.
- B. Submit name of the individual authorized to receive change documents and who will be responsible for informing others in Contractor's employ or subcontractors of changes to Contract Documents.
- C. Contract Change Order Forms: Form as directed by District.
- D. For minor changes not involving an adjustment to the Contract Sum or Contract Time, Architect will issue instructions directly to Contractor.
  1. Architect's Supplemental Instructions:
    - a. Minor changes in the Work, not involving an adjustment in either the Contract Sum or Contract Time, as authorized by the Conditions of the Contract, will be presented by the Architect using the Architect's Bulletin form.
    - b. Should the Architect's Supplemental Instructions result in disputed costs and time adjustments, such dispute shall be resolved in accordance with the provisions of the Conditions of the Contract.
- E. DSA Construction Change Document approval for substitutions and changes to structural, accessibility, or fire-life-safety portions of approved Drawings and Specifications is required from DSA prior to fabrication and installation. DSA IR A-6; CAC Section 4-215, & 4-233(c).

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 3
--	--	--



1. The approved Construction Change Document shall be signed by:
  - a. Architect of Record.
  - b. When applicable:
    - 1) Structural Engineer of Record.
    - 2) Mechanical Engineer of Record.
    - 3) Electrical Engineer of Record.
    - 4) Civil Engineer of Record.
    - 5) Delegated Professional Engineer.
  - c. Division of the State Architect for final approval.
- F. For other required changes, not involving structural, accessibility, or fire-life-safety portions of approved Drawings and Specifications, Architect will issue a document signed by District instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order.
  1. The document will describe the required changes and will designate method of determining any change in Contract Sum or Contract Time.
  2. Promptly execute the change.
  3. Construction Change Directive approval is required from DSA prior to installation.
  4. Construction Change Directives: In accordance with provisions of the Conditions of the Contract, the District may direct the Contractor to proceed with a change in the Work prior to formal preparation, review and agreement of a Contract Change Order, in order to not delay construction.
    - a. The Architect will prepare and issue a change document containing a Construction Change Directive which, when signed by the District and the Architect, shall instruct the Contractor to proceed with a change in the Work, for subsequent inclusion in a Contract Change Order.
    - b. Should the Construction Change Directive result in disputed costs and time adjustments, such dispute shall be resolved in accordance with the provisions of the Conditions of the Contract.
    - c. Construction Change Directives shall follow procedures specified below for Contract Change Orders except that Contractor shall immediately proceed with the change upon receipt of the signed Change Directive.
- G. For changes for which advance pricing is desired, Architect will issue a document that includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 14 days.
  1. Such Request for Proposal may include an estimate of additions or deductions in Contract Time and Contract Sum for executing the change and may include stipulations regarding overtime work and the period of time the requested response from the Contractor shall be considered valid.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 4
--	--	--

- H. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and a statement describing the effect on work by separate or other contractors. Document any requested substitutions in accordance with Section 01 60 00 .
1. After review of the request and with the District's approval, the Architect will prepare a change document containing a Request for Proposal, as described above.
  2. Issuance of such a request by the Architect shall not indicate authorization of the Contractor to proceed with the proposed change.
  3. Changes will be approved only by an approved Construction Change Directive and Contract Change Order.
- I. Computation of Change in Contract Amount: As specified in the Agreement and Conditions of the Contract.
1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
  2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
  3. For pre-determined unit prices and quantities, the amount will be based on the fixed unit prices.
  4. For change ordered by Architect without a quotation from Contractor, the amount will be determined by Architect based on the Contractor's substantiation of costs as specified for Time and Material work.
- J. Substantiation of Costs: Provide full information required for evaluation.
1. On request, provide the following data:
    - a. Quantities of products, labor, and equipment.
    - b. Taxes, insurance, and bonds.
    - c. Overhead and profit.
    - d. Justification for any change in Contract Time.
    - e. Credit for deletions from Contract, similarly documented.
  2. Support each claim for additional costs with additional information:
    - a. Origin and date of claim.
    - b. Dates and times work was performed, and by whom.
    - c. Time records and wage rates paid.
    - d. Invoices and receipts for products, equipment, and subcontracts, similarly documented.
  3. For Time and Material work, submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract.
    - a. Cost and Time Resolution: If amounts for changes in Contract Sum and Contract Time cannot be agreed upon by District and Contractor, amounts shall be resolved in accordance with provisions of the Conditions of the Contract for resolution of

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 5
--	--	--

disputes and the following:

- 1) Contractor shall keep accurate records of time, both labor and calendar days, and cost of materials and equipment.
  - 2) Contractor shall prepare and submit an itemized account and supporting data after completion of changed Work, within the time limits indicated in the Conditions of the Contract.
  - 3) Contractor shall provide full information as required and requested, for District and Architect to evaluate and substantiate proposed costs and time for the change in the Work.
  - 4) When District and Contractor determine mutually acceptable amounts for changes in Contract Sum and Contract Time, a Contract Change Order shall be executed for these amounts.
  - 5) District shall have the right to audit Contractor's invoices and bid quotations to substantiate costs for Contract Change Orders.
- K. Construction Changes Based on Stipulated Sum or Time: Based on the Contractor's response to a Request for Proposal or Construction Change Directive, the District and Architect will review the response.
1. The District and Contractor shall negotiate a mutually acceptable adjustment in Contract Sum and Contract Time, as appropriate, prior to performance of the changed Work.
  2. A Contract Change Order for the stipulated amounts shall be prepared based on the stipulated sum and change in time.
- L. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.
1. When agreement is reached on changes, if any, in the Contract Time and the Contract Sum, the Contractor shall prepare a Contract Change Order using a form as directed by the District, with supplementary documents as necessary to describe the change and the associated costs and schedule impacts.
  2. Construction Change Document approval is required from DSA prior to fabrication and installation.
  3. Submit Contract Change Orders to District through the Architect.
  4. Contractor shall prepare and submit five original sets of documents for each Change Order. District, Architect and DSA shall sign the Change Order indicating acceptance and approval of the change.
    - a. Structural Engineer shall also sign the Change Order, when applicable.
  5. All Change Orders must be approved by DSA prior to fabrication and installation.
  6. Upon approval of the Change Order, Contractor shall promptly execute the change in the Work.
- M. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 6
--	--	--

- N. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
  - 1. Contractor shall submit revised schedules at the next Application for Payment following approval and acceptance of the Contract Change Order.
- O. Promptly enter changes in Project Record Documents.

**1.07 APPLICATION FOR FINAL PAYMENT**

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
  - 1. All closeout procedures specified in Section 01 70 00.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Price and Payment Procedures 01 20 00 - 7
--	--	--

## **SECTION 01 25 00 SUBSTITUTION PROCEDURES**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Procedural requirements for proposed substitutions.

#### **1.02 RELATED REQUIREMENTS**

- A. Division 00 - Procurement and Contracting Requirements: Restrictions on timing of substitution requests.
- B. Section 00 43 25 - Substitution Request Form - During Procurement: Required form for substitution requests made prior to award of contract (During procurement).
- C. Section 00 63 25 - Substitution Request Form - During Construction: Required form for substitution requests made after award of contract (During construction).
- D. Section 01 30 00 - Administrative Requirements: Submittal procedures, coordination.
- E. Section 01 60 00 - Product Requirements: Fundamental product requirements, product options, delivery, storage, and handling.
- F. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions: Restrictions on emissions of indoor substitute products.

#### **1.03 DEFINITIONS**

- A. Substitutions: Changes from Contract Documents requirements proposed by Contractor to materials, products, assemblies, and equipment.
  - 1. Substitutions for Cause: Proposed due to changed Project circumstances beyond Contractor's control.
    - a. Unavailability.
    - b. Regulatory changes.
  - 2. Substitutions for Convenience: Proposed due to possibility of offering substantial advantage to the Project.
    - a. Substitution requests offering advantages solely to the Contractor will not be considered.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 GENERAL REQUIREMENTS**

- A. Requests by Contractor to deviate from specified requirements for products, materials, equipment, and methods, or to provide products other than those specified, shall be

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 1
--	--	---

considered requests for substitutions except under the following conditions:

1. Substitutions are requested during the bidding period, and accepted prior to execution of the Contract. Acceptance shall be in the form of written Addendum to the Bidding documents or revision to the Drawings or Specifications for use as Construction Contract Documents.
  2. Changes in products, materials, equipment, and methods of construction are directed by the District or Architect.
  3. Contractor options for provision of products and construction methods are specifically stated in the Contract Documents.
  4. Change in products, materials, equipment, and methods of construction is required for compliance with Codes, ordinances, regulations, orders and standards of authorities having jurisdiction.
- B. Substitution Provisions: Refer to substitution provisions of the Conditions of the Contract, in addition to the requirements specified herein. Provisions for consideration and acceptance of substitutions shall be as follows:
1. Documentation:
    - a. Substitutions will not be considered if they are indicated or implied on shop drawing, product data or sample submittals.
    - b. All requests for substitution shall be made by separate written request from Contractor.
  2. Cost and Time Considerations: Substitutions will not be considered unless a net reduction in Contract Sum or Contract Time results to the District's benefit, including redesign costs, life cycle costs, changes in related Work and overall performance of building systems.
  3. Design Revision:
    - a. Substitutions will not be considered if acceptance will require substantial revision of the Contract Documents or will substantially change the intent of the design, in the opinion of the Architect.
    - b. The intent of the design shall include functional performance and aesthetic qualities.
  4. Data: It shall be the responsibility of the Contractor to provide adequate data demonstrating the merits of the proposed substitution, including cost data and information regarding changes in related Work.
  5. Determination by Architect:
    - a. Architect will determine the acceptability of proposed substitutions and will notify Contractor, in writing within a reasonable time, of acceptance or rejection.
    - b. The determination by the Architect regarding functional performance and aesthetic quality shall be final.
  6. Non-Acceptance: If a proposed substitution is not accepted, provide the specified product.
    - a. If, in the opinion of the Architect, the substitution request is incomplete or has insufficient data to enable a full and thorough review of the intended substitution, the substitution may be summarily refused and determined to be unacceptable.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 2
--	--	---

7. Substitution Limitation: Only one request for substitution will be considered for each product.
- C. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
  1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
    - a. Include a signed certification that the Contractor has:
      - 1) Reviewed the proposed substitution and has determined that the substitution is equivalent or superior in every respect to product requirements indicated or product specified in the Contract Documents.
      - 2) Certify the proposed substitution is suited for and can perform the purpose or application of the specified product indicated or specified in the Contract Documents.
  2. Agrees to provide the same warranty for the substitution as for the specified product.
  3. Agrees to provide same or equivalent maintenance service and source of replacement parts, as applicable.
  4. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to District.
  5. Waives claims for additional costs or time extension that may subsequently become apparent.
    - a. Include a signed waiver by the Contractor for changes in the Contract Time or Contract Sum because of the following:
      - 1) Substitution failed to perform adequately.
      - 2) Substitution required changes in on other elements of the Work.
      - 3) Substitution caused problems in interfacing with other elements of the Work.
      - 4) Substitution was determined to be unacceptable by authorities having jurisdiction.
  6. Agrees to reimburse District and Architect for review or redesign services associated with re-approval by authorities.
- D. A Substitution Request for specified installer constitutes a representation that the submitter:
  1. Has acted in good faith to obtain services of specified installer, but was unable to come to commercial, or other terms.
- E. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.
  1. Note explicitly any non-compliant characteristics.
- F. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
  1. Forms indicated and included in the Project Manual are adequate for this purpose, and must be used.

2. No specific form is required. Contractor's Substitution Request documentation must include the following:
  - a. Project Information:
    - 1) Official project name and number, and any additional required identifiers established in Contract Documents.
    - 2) District's, Architect's, and Contractor's names.
  - b. Substitution Request Information:
    - 1) Discrete and consecutive Substitution Request number, and descriptive subject/title.
    - 2) Indication of whether the substitution is for cause or convenience.
    - 3) Issue date.
    - 4) Reference to particular Contract Document(s) specification section number, title, and article/paragraph(s).
    - 5) Description of Substitution.
    - 6) Reason why the specified item cannot be provided.
    - 7) Differences between proposed substitution and specified item.
    - 8) Description of how proposed substitution affects other parts of work.
  - c. Attached Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item:
    - 1) Physical characteristics.
    - 2) In-service performance.
    - 3) Expected durability.
    - 4) Visual effect.
    - 5) Sustainable design features.
    - 6) Warranties.
    - 7) Other salient features and requirements.
    - 8) Include, as appropriate or requested, the following types of documentation:
      - (a) Product Data:
      - (b) Samples.
      - (c) Certificates, test, reports or similar qualification data.
      - (d) Drawings, when required to show impact on adjacent construction elements.
    - 9) Include a detailed description, in written or graphic form as appropriate, indicating all changes or modifications needed to other elements of the Work and to construction to be performed by the District and by others under separate Contract with District, that will be necessary if the proposed substitution is accepted.
  - d. Impact of Substitution:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 4
--	--	---



- 1) Savings to District for accepting substitution.
    - (a) Include detailed cost data, including a proposal for the net change, if any, in the Contract Sum.
  - 2) Change to Contract Time due to accepting substitution.
    - (a) Indicate the substitution's effect on the Construction Schedule. Indicate the effect of the proposed substitution on overall Contract Time and, as applicable, on completion of portions of the Work for use by District or for work under separate contract by District.
- G. Limit each request to a single proposed substitution item.
1. Submit an electronic document, combining the request form with supporting data into single document.

### **3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT**

- A. Submittal Time Restrictions:
1. District will consider requests for substitutions only if submitted at least 10 days prior to the date for receipt of bids.
- B. Instructions to Bidders specifies time restrictions for submitting requests for substitutions during the bidding period, and the documents required.
- C. Pursuant to Section 3400 of the Public Contract Code, requests for substitution will be considered only if received up to 7 days prior to the bid date. Subsequent requests will be considered only in the case of product unavailability, through no fault of the Contractor , or for reasons of cost reducing value analysis requested by the District .
- D. Submittal Form (before award of contract):
1. Submit substitution requests by completing the form in Section 00 43 25; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.

### **3.03 SUBSTITUTION PROCEDURES DURING CONSTRUCTION**

- A. Submittal Form (after award of contract):
1. Submit substitution requests by completing the form in Section 00 63 25; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.
- B. After Contract award, requests will be considered for cause only; in the case of product unavailability, through no fault of the Contractor , or for reasons of cost reducing value analysis requested by the District.
1. Substitutions will be considered when a product, through no fault of the Contractor, becomes unavailable or unsuitable due to regulatory change.
  2. Product Availability Waiver:
    - a. Substitutions will be considered after 35 day time limit only when a product becomes unavailable due to no fault of Contractor.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 5
--	--	---

- b. Failure to place orders for specified products sufficiently in advance of required date for incorporation into the Work will not be considered as a valid reason for which Contractor may request a substitution or deviation from requirements of the Drawings and Specifications.
  - 3. Waiver: At the discretion of the District, limitations on substitutions may be waived.
- C. Submit request for Substitution for Cause within 14 days of discovery of need for substitution, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
- D. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Architect, in order to stay on approved project schedule.
  - 1. In addition to meeting general documentation requirements, document how the requested substitution benefits the District through cost savings, time savings, greater energy conservation, or in other specific ways.
  - 2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
  - 3. Bear the costs engendered by proposed substitution of:
    - a. District's compensation to the Architect for any required redesign, time spent processing and evaluating the request.
    - b. Other construction by District.
    - c. Other unanticipated project considerations.
- E. Substitutions will not be considered under one or more of the following circumstances:
  - 1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
  - 2. Without a separate written request.
  - 3. When acceptance will require revisions to Contract Documents.

#### **3.04 CONTRACT DOCUMENT REVISIONS:**

- A. Should a Contractor-proposed substitution or alternative sequence or method of construction require revision of the Contract Drawings or Specifications;
  - 1. Including revisions for the purposes of determining feasibility, scope or cost, or revisions for the purpose of obtaining review and approval by authorities having jurisdiction.
  - 2. Revisions will be made by Architect or other consultant of District who is the responsible design professional, as approved in advance by District.
- B. Services of Architect or other consultant of the District, including time spent in researching and reporting on proposed substitutions or alternative sequence and method of construction, shall be paid by Contractor when such activities are considered additional services to the design services contracts of the Architect or other responsible design professional with the District.
- C. Costs of services by Architect or other responsible design professional of the District shall be paid on a time and materials basis, based on current hourly fee schedules, with reproduction, long distance telephone and shipping costs reimbursable at cost plus usual and customary mark-up for handling and

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 6
--	--	---

billing.

- D. Such fees shall be paid whether or not the proposed substitution or alternative sequence or method of construction is ultimately accepted by District and a Change Order is executed.
- E. Such fees shall be paid from Contractor's portion of savings, if a net reduction in Contract Sum results. If fees exceed Contractor's portion of net reduction, Contractor shall pay all remaining fees unless otherwise agreed in advance by the District.
- F. Such fees owed shall be deducted from the amount owed Contractor on the Application for Payment next made following completion of revised Contract Drawings and Specifications or completion of research and other services. District will then pay Architect or other consultant of the District.
- G. Certain substitutions require approval from DSA.
  - 1. Substitutions affecting DSA-regulated items shall be considered as construction change documents (CCD's) and shall be approved by DSA prior to construction per DSA IR A-6 and Section 338(c) Part 1, Title 24 CCR. See Section 01 20 00 - Price and Payment Procedures.

### **3.05 RESOLUTION**

- A. Architect may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.
- B. Architect will notify Contractor in writing of decision to accept or reject request.
  - 1. Architect's decision following review of proposed substitution will be noted on the submitted form.

### **3.06 ACCEPTANCE**

- A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

### **3.07 CLOSEOUT ACTIVITIES**

- A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.
- B. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

### **3.08 ATTACHMENTS**

- A. A facsimile of the Substitution Request Form (During Construction) required to be used on the Project is included after this section.

## **END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Substitution Procedures 01 25 00 - 7
--	--	---

**SECTION 01 30 00**  
**ADMINISTRATIVE REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General administrative requirements.
- B. Electronic document submittal service.
- C. Preconstruction meeting.
- D. Site mobilization meeting.
- E. Progress meetings.
- F. Construction progress schedule.
- G. Contractor's daily reports.
- H. Progress photographs.
- I. Submittals for review, information, and project closeout.
- J. Number of copies of submittals.
- K. Requests for Interpretation or Information (RFI) procedures.
- L. Submittal procedures.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 60 00 - Product Requirements: General product requirements.
- B. Section 01 70 00 - Execution and Closeout Requirements: Additional coordination requirements.
- C. Section 01 78 00 - Closeout Submittals: Project record documents; operation and maintenance data; warranties and bonds.
- D. Technical Product Sections: Procedures for specific submittals specified in those Sections to be made at Contract closeout.

**1.03 DEFINITIONS**

- A. Action Submittals: Written and graphic information that requires responsive action by Construction Manager and Architect or other responsible design professional.
- B. Informational Submittals: Written information that does not require responsive action by Construction Manager and Architect or other responsible design professional.
- C. Unsolicited Submittals: Action or informational submittals not required by the Contract Documents or not requested by the reviewer. Unsolicited submittals may be returned with notation "not reviewed."
- D. Product Data: Standard published information ("catalog cuts") and specially prepared data for the Work of the Contract, including standard illustrations, schedules, brochures, diagrams, performance charts, instructions and other information to illustrate a portion of the Work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 1
--	--	---

- E. Request for Interpretation or Information (RFI): A document submitted by the Contractor requesting clarification of a portion of the Contract Documents, hereinafter referred to as an RFI.
- F. Samples: Physical examples that demonstrate the materials, finishes, features, workmanship and other characteristics of a portion of the Work. Accepted samples shall serve as quality basis for evaluating the Work.
- G. Shop Drawings, Product Data and Samples: Instruments prepared and submitted by Contractor, for Contractor's benefit, to communicate to Architect the Contractor's understanding of the design intent, for review and comment by Architect on the conformance of the submitted information to the general intent of the design. Shop drawings, product data and samples are not Contract Documents.
- H. Shop Drawings: Drawings, diagrams, schedules and illustrations, with related notes, specially prepared for the Work of the Contract, to illustrate a portion of the Work.
- I. Other Submittals: Technical data, test reports, calculations, surveys, certifications, special warranties and guarantees, operation and maintenance data, extra stock and other submitted information and products shall not be considered as Contract Documents but shall be information from Contractor to Architect to illustrate a portion of the Work for confirmation of understanding of design intent.

#### **1.04 PROJECT COORDINATOR**

- A. Project Coordinator: Construction Manager.
- B. Cooperate with the Project Coordinator in allocation of mobilization areas of site; for field offices and sheds, for material delivery access, traffic, and parking facilities.
  - 1. Comply with requirements of Section 01 70 00 - Execution and Closeout Requirements for coordination of execution of administrative tasks with timing of construction activities.
- C. During construction, coordinate use of site and facilities through the Project Coordinator.
- D. Comply with Project Coordinator's procedures for intra-project communications; submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- E. Comply with instructions of the Project Coordinator for use of temporary utilities and construction facilities. Responsibility for providing temporary utilities and construction facilities is identified in Section 01 10 00 - Summary.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to Architect through the Project Coordinator:
  - 1. Requests for Interpretation or Information.
  - 2. Requests for substitution.
  - 3. Shop drawings, product data, and samples.
  - 4. Test and inspection reports.
  - 5. Manufacturer's instructions and field reports.
  - 6. Applications for payment and change order requests.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 2
--	--	---

7. Progress schedules.
8. Coordination drawings.
9. Correction Punch List and Final Correction Punch List for Final Inspection.
10. Closeout submittals.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 ELECTRONIC DOCUMENT SUBMITTAL SERVICE**

- A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF, MS Word, or MS Excel) format, as appropriate to the document, and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.
  1. Besides submittals for review, information, and closeout, this procedure applies to Requests for Interpretation or Information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punchlist, and any other document any participant wishes to make part of the project record.
  2. Contractor and Architect are required to use this service.
  3. It is Contractor's responsibility to submit documents in allowable format.
  4. Subcontractors, suppliers, and Architect's consultants are to be permitted to use the service at no extra charge.
  5. Users of the service need an email address, internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, [www.adobe.com](http://www.adobe.com), or Bluebeam PDF Revu, [www.bluebeam.com](http://www.bluebeam.com)), unless such software capability is provided by the service provider.
  6. Unless specifically requested, paper document transmittals will not be reviewed; emailed electronic documents will not be reviewed.
  7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.
- B. Cost: The cost of the service is to be paid by Contractor; include the cost of the service in the Contract Sum.
- C. Submittal Service: The selected service is:
  1. Bluebeam Software Inc.; Bluebeam Revu Studio: [www.bluebeam.com](http://www.bluebeam.com).
  2. Other Service acceptable to both District and Architect.
    - a. Direct email with PDF copies.
- D. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 3
--	--	---

1. Representatives of District are scheduled and included in this training.
- E. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for District.

### **3.02 PRECONSTRUCTION MEETING**

- A. District will schedule a meeting after Notice of Award.
- B. Attendance Required:
  1. District.
  2. Architect.
  3. Contractor.
  4. Construction Manager.
- C. Agenda:
  1. Execution of District-Contractor Agreement.
  2. Submission of executed bonds and insurance certificates.
  3. Distribution of Contract Documents.
  4. Submission of list of subcontractors, list of products, schedule of values, and progress schedule.
  5. Submission of initial Submittal schedule.
  6. Designation of personnel representing the parties to Contract and Architect.
  7. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
  8. Scheduling.
  9. Scheduling activities of a Geotechnical Engineer.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, District, participants, and those affected by decisions made.

### **3.03 SITE MOBILIZATION MEETING**

- A. Project Coordinator will schedule meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
  1. Contractor.
  2. District.
  3. Architect.
  4. Construction Manager.
  5. Special consultants.
  6. Contractor's superintendent.
  7. Major subcontractors.
  8. Inspector of Record.
  9. DSA Field Representative.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 4
--	--	---

C. Agenda:

1. Designation of Key Personnel: Contractor shall designate key personnel and provide a name and address list which includes the following:
  - a. Contractor: Project Manager and Superintendent.
  - b. Major subcontractors: Principal/Project Manager and Superintendent.
  - c. Major materials suppliers: Contact person.
2. Distribute and discuss list of subcontractors and suppliers.
3. Project Communication Procedures: Review requirements and administrative requirements for written and oral communications.
  - a. Review requirements and administrative procedures Contractor may wish to institute for identification and reporting purposes.
4. Change Procedures: Review requirements and administrative procedures for Change Orders, Construction Change Directives, Architect's supplemental instructions and Contractor's Requests for Interpretation or Information.
5. Use of premises by District and Contractor.
  - a. Site access restrictions, if any, and requirements to avoid disruption of operations at adjoining facilities or operations.
  - b. Construction Facilities and Temporary Utilities: Designate storage and staging areas, construction office areas; review temporary utility provisions; present District's requirements for use of premises.
6. District's requirements.
7. Construction facilities and controls provided by District.
8. Temporary utilities provided by District.
9. Survey and building layout.
10. Security and housekeeping procedures.
11. Schedules.
  - a. Distribute and discuss initial construction schedule and critical work sequencing of major elements of Work;
  - b. Include coordination of District Furnished / Contractor Installed (OFCl) products;
  - c. Work under separate contracts by serving utility agencies;
  - d. Work under separate contracts by companies and District.
12. Review requirements for Contractor's coordination of Work; review sequence and schedule for work being performed for District under separate contracts.
13. Submittals Administration: Review administrative procedures for shop drawings, product data and samples submittals and review of preliminary Submittals Schedule.
14. Materials and Equipment:
  - a. Review substitution requirements;
  - b. Review schedule for major equipment purchases and deliveries;

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 5
--	--	---



- c. Review materials and equipment to be provided by District (OFCl products).
- 15. Permits and Fees: Review Contract requirements and review schedule and process for obtaining permits and paying fees.
- 16. Application for payment procedures.
- 17. Procedures for testing.
  - a. Review tests and inspections to be performed by the following:
    - 1) Independent testing and inspection agency.
    - 2) Manufacturers and installers.
    - 3) Serving utilities and public agencies.
    - 4) Authorities having jurisdiction.
- 18. Procedures for maintaining record documents.
- 19. Requirements for start-up of equipment.
  - a. Operation and Maintenance Data:
    - 1) Format and content of operation and maintenance manuals; instruction of District's personnel.
- 20. Inspection and acceptance of equipment put into service during construction period.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, District, participants, and those affected by decisions made.

### **3.04 PROGRESS MEETINGS**

- A. Schedule and administer meetings throughout progress of the work at maximum bi-weekly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Meeting Time and Location: As mutually agreed by District, Architect, and Contractor, at on-site location.
- D. Special Meetings: As necessary, Construction Manager may convene special meetings to discuss specific construction issues in detail and to plan specific activities.
  - 1. See Section 01 70 00 - Execution and Closeout Requirements.
- E. Attendance Required:
  - 1. Contractor.
  - 2. District.
  - 3. Architect.
  - 4. Construction Manager.
  - 5. Special consultants.
  - 6. Contractor's superintendent.
  - 7. Major subcontractors.
  - 8. Inspector of Record.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 6
--	--	---

F. Agenda:

1. Review minutes of previous meetings.
  - a. Unless published minutes are challenged in writing prior to the next regularly scheduled progress meeting, they will be accepted as properly stating the activities and decisions of the meeting.
  - b. Persons challenging published minutes shall reproduce and distribute copies of the challenge to all indicated recipients of the particular set of minutes.
  - c. Challenge to minutes shall be settled as priority portions of "old business" at the next regularly scheduled meeting.
2. Review of work progress.
3. Field observations, problems, and decisions.
4. Identification of problems that impede, or will impede, planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of RFIs log and status of responses.
7. Review of off-site fabrication and delivery schedules.
8. Maintenance of progress schedule.
9. Corrective measures to regain projected schedules.
  - a. Develop corrective measures and procedures, including but not necessarily limited to additional personnel loading to regain planned schedule.
10. Planned progress during succeeding work period.
11. Coordination of projected progress.
12. Maintenance of quality and work standards.
13. Effect of proposed changes on progress schedule and coordination.
14. Other business relating to work.

- G. Record minutes and distribute copies within two days after meeting to participants, with copies to Architect, District, participants, and those affected by decisions made.

**3.05 CONSTRUCTION PROGRESS SCHEDULE**

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of work, with a general outline for remainder of work.
- B. Contractor's Review: All schedules shall be reviewed and approved by Contractor prior to submission for Architect's and District's review.
- C. Reviews by Architect and District will be to ascertain the general status of construction and shall not be interpreted to establish or approve the means, methods, techniques and sequences of construction.
- D. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- E. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 7
--	--	---

1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- F. Within 10 days after joint review, submit complete schedule.
- G. Submit updated schedule with each Application for Payment.

### **3.06 DAILY CONSTRUCTION REPORTS**

- A. Include only factual information. Do not include personal remarks or opinions regarding operations and/or personnel.
- B. In addition to transmitting electronically a copy to District and Architect, submit two printed copies at weekly intervals.
  1. Submit in format acceptable to District.
  2. Submit using required form, a sample of which is appended to this section.
- C. Prepare a daily construction report recording the following information concerning events at Project site and project progress:
  1. Date.
  2. High and low temperatures, and general weather conditions.
  3. List of subcontractors at Project site.
  4. List of separate contractors at Project site.
  5. Approximate count of personnel at Project site.
    - a. Include a breakdown for supervisors, laborers, journeymen, equipment operators, and helpers.
  6. Major equipment at Project site.
  7. Material deliveries.
  8. Safety, environmental, or industrial relations incidents.
  9. Meetings and significant decisions.
  10. Unusual events (submit a separate special report).
  11. Stoppages, delays, shortages, and losses. Include comparison between scheduled work activities (in Contractor's most recently updated and published schedule) and actual activities. Explain differences, if any. Note days or periods when no work was in progress and explain the reasons why.
  12. Meter readings and similar recordings.
  13. Emergency procedures.
  14. Directives and requests of Authority(s) Having Jurisdiction (AHJ).
  15. Change Orders received and implemented.
  16. Testing and/or inspections performed.
  17. List of verbal instruction given by District and/or Architect.
  18. Signature of Contractor's authorized representative.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 8
--	--	---

### 3.07 PROGRESS PHOTOGRAPHS

- A. Submit photographs with each application for payment, taken not more than 3 days prior to submission of application for payment.
- B. Maintain one set of all photographs at project site for reference; same copies as submitted, identified as such.
- C. Photography Type: Digital; electronic files.
- D. Provide photographs of site and construction throughout progress of work produced by an experienced photographer, acceptable to Architect.
- E. In addition to periodic, recurring views, take photographs of each of the following events:
  - 1. Completion of site clearing.
  - 2. Excavations in progress.
  - 3. Foundations in progress and upon completion.
  - 4. Structural framing in progress and upon completion.
  - 5. Enclosure of building, upon completion.
  - 6. Final completion, minimum of ten (10) photos.
- F. Take photographs as evidence of existing project conditions as follows:
  - 1. Interior views: each elevation, floor and ceilings prior to demolition.
  - 2. Exterior views: each elevation, roof and areas adjacent to construction limits.
- G. Views:
  - 1. Provide non-aerial photographs from four cardinal views at each specified time, until date of Final Inspection.
  - 2. Consult with Architect for instructions on views required.
  - 3. Provide factual presentation.
  - 4. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field, and minimum distortion.
  - 5. Point of View Sketch: Provide sketch identifying point of view of each photograph.
- H. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.
  - 1. Delivery Medium: Via email.
  - 2. File Naming: Include project identification, date and time of view, and view identification.
  - 3. Point of View Sketch: Include digital copy of point of view sketch with each electronic submittal; include point of view identification in each photo file name.
  - 4. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.
  - 5. Photo CD(s): Provide 1 copy including all photos cumulative to date and PDF file(s), with files organized in separate folders by submittal date.
  - 6. Hard Copy: Printed hardcopy (grayscale) of PDF file and point of view sketch.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 9
--	--	---

### 3.08 REQUESTS FOR INTERPRETATION OR INFORMATION (RFI)

- A. Definition: A request seeking one of the following:
  - 1. An interpretation, amplification, or clarification of some requirement of Contract Documents arising from inability to determine from them the exact material, process, or system to be installed; or when the elements of construction are required to occupy the same space (interference); or when an item of work is described differently at more than one place in the Contract Documents.
  - 2. A resolution to an issue which has arisen due to field conditions and affects design intent.
- B. Whenever possible, request clarifications at the next appropriate project progress meeting, with response entered into meeting minutes, rendering unnecessary the issuance of a formal RFI.
- C. Preparation: Prepare an RFI immediately upon discovery of a need for interpretation of Contract Documents. Failure to submit a RFI in a timely manner is not a legitimate cause for claiming additional costs or delays in execution of the work.
  - 1. Prepare a separate RFI for each specific item.
    - a. Review, coordinate, and comment on requests originating with subcontractors and/or materials suppliers.
    - b. Do not forward requests which solely require internal coordination between subcontractors.
  - 2. Prepare in a format and with content acceptable to District.
  - 3. Combine RFI and its attachments into a single electronic file. PDF format is preferred.
- D. Reason for the RFI: Prior to initiation of an RFI, carefully study all Contract Documents to confirm that information sufficient for their interpretation is definitely not included.
  - 1. Include in each request Contractor's signature attesting to good faith effort to determine from Contract Documents information requiring interpretation.
    - a. Submit RFIs from subcontractors and material suppliers through, be reviewed by and be attached to an RFI prepared, signed and submitted by Contractor.
      - 1) RFIs from subcontractors and material suppliers are to be:
        - (a) Reviewed by Contractor.
        - (b) Corrected and rewritten to clarify as required by Contractor.
        - (c) Placed on the proper form, then signed, and submitted by Contractor.
        - (d) RFIs submitted directly by subcontractors or material suppliers will be returned unanswered to the Contractor.
      - 2) RFIs submitted directly by subcontractors or material suppliers will be returned unanswered to the Contractor.
    - b. Review all subcontractor- and supplier-initiated RFIs and take actions to resolve issues of coordination, sequencing and layout of the Work.
      - 1) RFIs submitted to request clarification of issues related to means, methods, techniques and sequences of construction or for establishing trade jurisdictions

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 10
--	--	--

- and scopes of subcontracts will be returned without response.
- (a) Such issues are solely the Contractor's responsibility.
- 2) Contractor is responsible for delays resulting from the necessity to resubmit an RFI due to insufficient or incorrect information presented in the RFI.
2. Unacceptable Uses for RFIs: Do not use RFIs to request the following::
- a. Approval of submittals (use procedures specified elsewhere in this section).
  - b. Approval of substitutions (see Section - 01 60 00 - Product Requirements)
  - c. Changes that entail change in Contract Time and Contract Sum (comply with provisions of the Conditions of the Contract).
  - d. Different methods of performing work than those indicated in the Contract Drawings and Specifications (comply with provisions of the Conditions of the Contract).
3. Improper RFIs: Requests not prepared in compliance with requirements of this section, and/or missing key information required to render an actionable response. They will be returned without a response, with an explanatory notation.
4. Frivolous RFIs: Requests regarding information that is clearly indicated on, or reasonably inferable from, Contract Documents, with no additional input required to clarify the question. They will be returned without a response, with an explanatory notation.
- a. The District reserves the right to assess the Contractor for the costs (on time-and-materials basis) incurred by the Architect, and any of its consultants, due to processing of such RFIs.
- E. Content: Include identifiers necessary for tracking the status of each RFI, and information necessary to provide an actionable response.
1. Official Project name and number, and any additional required identifiers established in Contract Documents.
  2. District's, Architect's, and Contractor's names.
  3. Discrete and consecutive RFI number, and descriptive subject/title.
  4. Issue date, and requested reply date.
  5. Reference to particular Contract Document(s) requiring additional information/interpretation. Identify pertinent drawing and detail number and/or specification section number, title, and paragraph(s).
  6. Annotations: Field dimensions and/or description of conditions which have engendered the request.
    - a. Inability to determine from the Contract Documents the exact material, process, or system to be installed;
    - b. Or when the elements of construction are required to occupy the same space (interference);
    - c. Or when an item of Work is described differently at more than one place in the Contract Documents.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 11
--	--	--

7. Contractor's suggested resolution: A written and/or a graphic solution, to scale, is required in cases where clarification of coordination issues is involved, for example; routing, clearances, and/or specific locations of work shown diagrammatically in Contract Documents. If applicable, state the likely impact of the suggested resolution on Contract Time or the Contract Sum.
  - a. In all cases, furnish all information required for the Architect to analyze and/or understand the circumstances causing the RFI and prepare a clarification or direction as to proceed for RFIs issued to request clarification of issues related to:
    - 1) Means, methods, techniques and sequences of construction, for example
    - 2) Pipe and duct routing, clearances;
    - 3) Specific locations of Work shown diagrammatically;
    - 4) Apparent interferences and similar items.
    - 5) If information included with this type RFI by the Contractor is insufficient, the RFI will be returned unanswered.
- F. Attachments: Include sketches, coordination drawings, descriptions, photos, submittals, and other information necessary to substantiate the reason for the request.
- G. RFI Log: Prepare and maintain a tabular log of RFIs for the duration of the project.
  1. Indicate current status of every RFI. Update log promptly and on a regular basis.
  2. Note dates of when each request is made, and when a response is received.
  3. Highlight items requiring priority or expedited response.
  4. Highlight items for which a timely response has not been received to date.
  5. Identify and include improper or frivolous RFIs.
- H. Review Time: Architect will respond and return RFIs to Contractor within seven calendar days of receipt. For the purpose of establishing the start of the mandated response period, RFIs received after 12:00 noon will be considered as having been received on the following regular working day.
  1. Response period may be shortened or lengthened for specific items, subject to mutual agreement, and recorded in a timely manner in progress meeting minutes.
- I. Responses: Content of answered RFIs will not constitute in any manner a directive or authorization to perform extra work or delay the project. If in Contractor's belief it is likely to lead to a change to Contract Sum or Contract Time, promptly issue a notice to this effect, and follow up with an appropriate Change Order request to District.
  1. Response may include a request for additional information, in which case the original RFI will be deemed as having been answered, and an amended one is to be issued forthwith. Identify the amended RFI with an R suffix to the original number.
  2. Do not extend applicability of a response to specific item to encompass other similar conditions, unless specifically so noted in the response.
  3. Upon receipt of a response, promptly review and distribute it to all affected parties, and update the RFI Log.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 12
--	--	--

4. Notify Architect within seven calendar days if an additional or corrected response is required by submitting an amended version of the original RFI, identified as specified above.

### 3.09 SUBMITTAL SCHEDULE

- A. Submit to Architect for review a schedule for submittals in tabular format.
  1. Submit at the same time as the preliminary schedule.
    - a. Submit initial Submittals Schedule within 14 days of date of Notice of Award of construction.
    - b. After review and return by Architect, resubmit Submittals Schedule within 10 days and thereafter submit updated Submittals Schedules at each Construction Progress Meeting.
    - c. Submit one copy each to Owner and Architect.
  2. Coordinate with Contractor's construction schedule and schedule of values.
  3. Format schedule to allow tracking of status of submittals throughout duration of construction.
    - a. Prepare schedules in Gantt format using software at Contractor's option, providing clear indication of sequencing and scheduling of Work, for determination of "critical path" of construction progress.
      - 1) Submittals shall be connected to the related construction element by a graphically indicated critical path on the same page.
      - 2) Present schedules using opaque reproductions on substantial paper, with sheet size a multiple of 8-1/2 by 11 inches and large enough to clearly read characters.
  4. Arrange information to include scheduled date for initial submittal, specification number and title, submittal category (for review or for information), description of item of work covered, and role and name of subcontractor.
  5. Account for time required for preparation, review, manufacturing, fabrication and delivery when establishing submittal delivery and review deadline dates.
    - a. For assemblies, equipment, systems comprised of multiple components and/or requiring detailed coordination with other work, allow for additional time to make corrections or revisions to initial submittals, and time for their review.
    - b. Allow time for shipping and distribution to involved parties. Minimum 1 day, including those sent by electronic transmission.
  6. Posting: Post one copy of most recent Submittals Schedule in Contractor's field office, readily available to District, Construction Manager, and Architect. Update bi-weekly with project schedule.
  7. Archive: Preserve a minimum of two copies of all superseded schedules, with one copy available at field office for review by District or Architect.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 13
--	--	--



### **3.10 SUBMITTALS FOR REVIEW**

- A. When the following are specified in individual sections, submit them for review:
  - 1. Product data.
  - 2. Shop drawings.
  - 3. Samples for selection.
  - 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for compliance with information given and the design concept expressed in Contract Documents.
- C. Samples will be reviewed for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 78 00 - Closeout Submittals.

### **3.11 SUBMITTALS FOR INFORMATION**

- A. When the following are specified in individual sections, submit them for information:
  - 1. Design data.
  - 2. Certificates.
  - 3. Test reports.
  - 4. Inspection reports.
  - 5. Manufacturer's instructions.
  - 6. Manufacturer's field reports.
  - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for District.

### **3.12 SUBMITTALS FOR COMMISSIONING**

- A. The Commissioning Authority will receive a copy of the standard submittals for equipment to be commissioned.
- B. The Commissioning Authority may require additional documentation necessary for the commissioning process. The Contractor will receive a written request from the Commissioning Authority for specific equipment or system information.

### **3.13 SUBMITTALS FOR PROJECT CLOSEOUT**

- A. Submit Correction Punch List for Substantial Completion.Final Inspection.
- B. Submit Final Correction Punch List for Final Inspection.
- C. When the following are specified in individual sections, submit them at project closeout in compliance with requirements of Section 01 78 00 - Closeout Submittals:
  - 1. Project record documents.
  - 2. Operation and maintenance data.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 14
--	--	--

- a. Include operation and maintenance data submittals in Submittals Schedule specified above.
  - b. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of design Professional, if applicable.
- 3. Warranties.
- 4. Bonds.
- 5. Other types as indicated.
- D. Submit for District's benefit during and after project completion.

### **3.14 NUMBER OF COPIES OF SUBMITTALS**

- A. Electronic Documents: Submit one electronic copy in PDF format with renderable text; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Small Size Sheets, Not Larger Than 11 by 17 inch: Submit one copy; the Contractor shall make his own copies from original returned by the Architect after making his own file copy.
- C. Extra Copies at Project Closeout: See Section 01 78 00.
- D. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
  - 1. After review, produce duplicates.
  - 2. Retained samples will not be returned to Contractor unless specifically so stated.
  - 3. Quantity:
    - a. Submit minimum of four (4) samples of each of color, texture and pattern.
    - b. Submit one item only of actual assembly or product.
    - c. Unless otherwise noted, full-size and complete samples will be returned and may be incorporated into field mock-ups and the Work.

### **3.15 SUBMITTAL PROCEDURES**

- A. General Requirements:
  - 1. Use a separate transmittal for each item.
  - 2. Submit separate packages of submittals for review and submittals for information, when included in the same specification section.
  - 3. Transmit using approved form.
  - 4. Sequentially identify each item. For revised submittals use original number and a sequential numerical suffix.
  - 5. Identify: Project; Contractor; subcontractor or supplier; pertinent drawing and detail number; and specification section number and article/paragraph, as appropriate on each copy.
    - a. For example:
      - 1) 09 21 16-1 - First submittal for Section 09 21 16 - Gypsum Board Assemblies.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 15
--	--	--

- 2) 09 21 16-2 - Second submittal for Section 09 21 16 - Gypsum Board Assemblies.
- b. Use same number for resubmittals as original submittal, followed by a letter indicating sequential resubmittal. For example:
  - 1) 09 21 16-2A - Resubmission of second submittal for Section 09 21 16 - Gypsum Board Assemblies.
  - 2) 09 21 16-2B - Second resubmission of second submittal for Section 09 21 16 - Gypsum Board Assemblies.
6. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
  - a. Submittals from sources other than the Contractor, or without Contractor's stamp will not be acknowledged, reviewed, or returned.
  - b. Field measurements have been determined and verified.
  - c. Conformance with requirements of Contract Drawings and Specifications is confirmed.
  - d. Catalog numbers and similar data are correct.
  - e. Work being performed by various subcontractors and trades is coordinated.
  - f. Field construction criteria have been verified, including confirmation that information submitted has been coordinated with the work being performed by others for District and actual site conditions.
  - g. All deviations from requirements of Drawings and Specifications have been identified and noted.
7. Deliver each submittal on date noted in submittal schedule, unless an earlier date has been agreed to by all affected parties, and is of the benefit to the project.
  - a. Send submittals in electronic format via email to Architect.
  - b. Upload submittals in electronic form to Electronic Document Submittal Service website.
8. Schedule submittals to expedite the Project, and coordinate submission of related items.
  - a. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
  - b. For sequential reviews involving Architect's consultants, District, or another affected party, allow an additional 7 days.
  - c. For sequential reviews involving approval from authorities having jurisdiction (AHJ), in addition to Architect's approval, allow an additional 30 days.
9. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed work.
  - a. Changes in the Work shall not be authorized by submittals review actions.
  - b. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 16
--	--	--

- c. Changes shall only be authorized by separate written Contract Change Order or Construction Change Directive, in accordance with the Conditions of the Contract and Section 01 20 00 - Price and Payment Procedures.
- 10. Provide space for Contractor and Architect review stamps.
- 11. When revised for resubmission, identify all changes made since previous submission.
- 12. Distribute reviewed submittals. Instruct parties to promptly report inability to comply with requirements.
- 13. Incomplete submittals will not be reviewed, unless they are partial submittals for distinct portion(s) of the work, and have received prior approval for their use.
- 14. Submittals not requested will be recognized, but will be returned without comment,
- B. Product Data Procedures:
  - 1. Submit only information required by individual specification sections.
  - 2. Collect required information into a single submittal.
  - 3. Submit concurrently with related shop drawing submittal.
  - 4. Do not submit (Material) Safety Data Sheets for materials or products.
- C. Shop Drawing Procedures:
  - 1. Prepare accurate, drawn-to-scale, original shop drawing documentation by interpreting Contract Documents and coordinating related work.
  - 2. Use of reproductions of Contract Documents in digital data form to create shop drawings is only permitted as defined in Division 01 and individual product sections.
  - 3. Coordination: Show all field dimensions and relationships to adjacent or critical features of Work.
  - 4. Generic, non-project-specific information submitted as shop drawings do not meet the requirements for shop drawings.
- D. Samples Procedures:
  - 1. Transmit related items together as single package.
  - 2. Samples will be reviewed for aesthetic, color, or finish selection.
  - 3. Identify each item to allow review for applicability in relation to shop drawings showing installation locations.
  - 4. Color Selection Samples: Architect will review and select colors for Project only after all colors are received, so that colors may be properly coordinated.
  - 5. Copies: Submit actual samples. Photographic or printed reproductions will not be accepted.
  - 6. Review of Field Samples: Review by Architect of field samples will be made for the following example products, as applicable, if not otherwise required and if requested by Contractor.
    - a. Concrete wall finishes and detailing (edges, corners and reveals).
    - b. Concrete paving colors and textures.
    - c. Gypsum board textures and finishes.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 17
--	--	--

- d. Field-applied paint colors and finishes.

### 3.16 SUBMITTAL REVIEW

- A. Submittals for Review: Architect will review each submittal, and approve, or take other appropriate action.
- B. Submittals for Information: Architect will acknowledge receipt and review. See below for actions to be taken.
- C. Architect's actions will be reflected by marking each returned submittal using virtual stamp on electronic submittals.
  - 1. Notations may be made directly on submitted items and/or listed on appended Submittal Review cover sheet.
- D. Architect's and consultants' actions on items submitted for review:
  - 1. Authorizing purchasing, fabrication, delivery, and installation:
    - a. "Approved", "Reviewed", or language with same legal meaning.
    - b. "Approved as Noted, Resubmission not required", or language with same legal meaning.
      - 1) At Contractor's option, submit corrected item, with review notations acknowledged and incorporated.
    - c. "Approved as Noted, Resubmit for Record", "Reviewed as Noted, Resubmit for Record", or language with same legal meaning.
      - 1) Resubmit corrected item, with review notations acknowledged and incorporated. Resubmit separately, or as part of project record documents.
      - 2) Non-responsive resubmittals may be rejected.
  - 2. Not Authorizing fabrication, delivery, and installation:
    - a. "Revise and Resubmit".
      - 1) Resubmit revised item, with review notations acknowledged and incorporated.
      - 2) Non-responsive resubmittals may be rejected.
    - b. "Rejected".
      - 1) Submit item complying with requirements of Contract Documents.
- E. Architect's and consultants' actions on items submitted for information:
  - 1. Items for which no action was taken:
    - a. "Received" - to notify the Contractor that the submittal has been received for record only.
  - 2. Items for which action was taken:
    - a. "Reviewed" - no further action is required from Contractor.

### END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Administrative Requirements 01 30 00 - 18
--	--	--

**SECTION 01 30 00.01  
REQUEST FOR INTERPRETATION**

**RFI NUMBER:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PROJECT NAME:** CHILDCARE CENTER SHADE STRUCTURE

**PROJECT NO.:** 1-30-65

**TO:** RUHNAU CLARK ARCHITECTS

. 951.684.4664 - 760.438.5899

Attention: \_\_\_\_\_

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

**BRIEF SUMMARY OF RFI:** \_\_\_\_\_

Drawing No. \_\_\_\_\_ Detail No. \_\_\_\_\_

Specification Section \_\_\_\_\_ Title

.Page \_\_\_\_\_ Paragraph \_\_\_\_\_

**DETAILS OF THIS RFI:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SUGGESTED SOLUTION:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Response required by: \_\_\_\_\_ (min. 3 full days) Submitted By:

\_\_\_\_\_

. Organization: \_\_\_\_\_

**RESPONSE:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attachments: \_\_\_\_\_

Response By: \_\_\_\_\_ Date:

\_\_\_\_\_

Organization: \_\_\_\_\_

Copies: ☐ File   ☐ District   ☐ Structural   ☐ Mechanical   ☐ Plumbing   ☐ Electrical  
              ☐ Civil   ☐ Landscape   ☐ other consultants

**END OF RFI**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Request for Interpretation 01 30 00.01 - 2
--	--	---



## SUBMITTAL / SHOP DRAWING TRANSMITTAL

To:	Ruhnau Clarke Architects	Contractor's Submittal No.	
Attn:	<b>Construction Dept.</b>		
Contractor:		Project Name:	
Street:		RCA's Project No.	
City, State:		Subcontractor:	

CONTRACTOR TO FILL OUT THE FOLLOWING COVERING ONE COMPLETE SECTION OF THE SPECIFICATIONS ONLY:

Specification Section #:	Section Title:
--------------------------	----------------

<input type="checkbox"/>	Initial Submittal	Scheduled Date of Submittal	
<input type="checkbox"/>	1st Resubmittal	Scheduled Date of Submittal Return	
<input type="checkbox"/>	___ Resubmittal	Date Sent	
<input type="checkbox"/>	Submittal was a previously approved substitution.	Number of Copies	
	Approved Substitution Request Transmittal Form is enclosed.	Number of Samples	

CONTRACTOR COMPLETE EITHER (A) OR (B) FOLLOWING, <u>CHECK ONE</u> :	CONSTRUCTION MANAGERS CERTIFICATION		
(A) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN (NO EXCEPTIONS). <input type="checkbox"/>	THIS IS TO CERTIFY THAT THE CONSTRUCTION MANAGER IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND THE SUBMITTAL IS COMPLETE PER THE CONTRACT DOCUMENTS.  SIGNATURE: _____ _____		
(B) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN, EXCEPT FOR THE FOLLOWING DEVIATIONS (LIST DEVIATIONS ON AN ATTACHED SHEET OR INDICATE DEVIATIONS CLEARLY ON SHOP DRAWINGS OR SUBMITTALS). <input type="checkbox"/>	<table><tr><th>CONTRACTORS CERTIFICATION</th></tr><tr><td>THIS IS TO CERTIFY THAT THE CONTRACTOR IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.  SIGNATURE: _____ _____</td></tr></table>	CONTRACTORS CERTIFICATION	THIS IS TO CERTIFY THAT THE CONTRACTOR IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.  SIGNATURE: _____ _____
CONTRACTORS CERTIFICATION			
THIS IS TO CERTIFY THAT THE CONTRACTOR IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.  SIGNATURE: _____ _____			

### ARCHITECT'S USE ONLY BELOW THIS LINE.

Action:

☐ No Exception Taken      ☐ Make Corrections Noted      ☐ Rejected/Resubmit      ☐ Revise and Resubmit

Comments:

_____
_____
_____
_____
_____
_____
_____
_____

Date Received By RRC:

Date Sent to Consultant:

Structural \_\_\_\_\_

Mechanical \_\_\_\_\_

Electrical \_\_\_\_\_

Other \_\_\_\_\_

Date Received From:

Consultant \_\_\_\_\_

No. of Copies Received \_\_\_\_\_

Final Distribution: Contractor \_\_\_\_\_ Inspector \_\_\_\_\_ District/P.M. \_\_\_\_\_ Architect \_\_\_\_\_

Final Distribution Date: \_\_\_\_\_



**SECTION 01 35 50  
REQUESTS FOR ELECTRONIC FILES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Requirements to request electronic construction document files from Architect.
- B. Hold Harmless Agreement form.

**1.02 RELATED SECTIONS**

- A. Section 01 30 00 - Administrative Requirements: Shop Drawings, Product Data and Samples.
- B. Section 01 70 00 - Execution and Closeout Requirements.
- C. Division 31 Site Work.

**1.03 REQUIREMENTS**

- A. Electronic files have legal ramifications as information therein can be modified.
- B. In order to receive this electronic information, the following Hold Harmless Agreement form must be executed in its entirety, including signature by a company officer.
- C. Costs for processing and handling electronic files, however limited, will be \$250.00

**PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION.)**

**PART 3 - EXECUTION**

**3.01 ELECTRONIC FILE TRANSFER PROCEDURE**

- A. Submit a check in the amount of \$250.00 along with a list of the requested sheet numbers and an acknowledged copy of this waiver to the office of the Architect, Ruhna Clark Architects, 3775 Tenth Street, Riverside California 92501 - 5751 Palmer Way, Suite C, Carlsbad California 92010.
- B. In order to expedite the transfer, upon receipt of a PDF copy of this acknowledgement, the requested CAD/Revit/BIM files will be sent in the form of a compact disc, DVD, or thumb drive to the recipient, as requested, by UPS, similar delivery service, or other method of electronic transfer after payment is received.
- C. It is expressly understood that any transfer is done as a courtesy and can be revoked at any time by the Architect.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Requests for Electronic Files 01 35 50 - 1
--	--	---

Agreement is on next page

## HOLD HARMLESS AGREEMENT

### ARCHITECT'S PROJECT: CHILDCARE CENTER SHADE STRUCTURE

### ARCHITECT'S PROJECT NUMBER: 1-30-65

We, \_\_\_\_\_, understand that we may be receiving electronic media containing design information, not necessarily intended for construction. We agree to hold Ruhna Clark Architects harmless for any defects in this data. We agree that it shall be our responsibility to reconcile this electronic data with the paper plans, and that only the paper plans shall be regarded as legal documents for the referenced project.

Further, the Contractor acknowledges that the Architect's reports, drawings, specifications, field data, field notes, laboratory test data, calculations, estimates and other similar documents are instruments of professional service, not products. In accepting and utilizing any drawings or other data on any form of electronic media generated and provided by the Design Professionals, the Parties listed above covenant and agree that all such drawings and data are instruments of service of the Design Professionals, who shall be deemed the author of the drawings and data, and shall retain all common law, statutory law and other rights, including copyrights.

The Parties agree that in accepting and utilizing any drawings and other data, that the Design Professionals waive all responsibility for any subsequent use of these data, the accuracy of dimensions, and the interpretation of information contained herein.

The Parties further agree not to use these drawings and data, in whole or in part, for any purpose or project other than the project which is the subject of this Agreement. The Parties further agree to waive all claims against the Design Professionals resulting in any way from any unauthorized changes of the drawings and data or any other use other than for the project which is the subject of this Agreement.

The Contractor shall indemnify, defend and hold harmless the Design Professionals and its subconsultants and their officers, agents, employees from any claims, damages, losses, liabilities or expenses (including attorneys' fees) arising out of use of such documents without Consultant's prior written authorization.

Under no circumstances shall transfer of the drawings and other data be deemed a sale by the Design Professionals, and the Design Professionals make no warranties, either express or implied of the merchantability and fitness of the data for any particular purpose.

Acknowledged by:

\_\_\_\_\_  
Signature of Company Officer Print or Type Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip Code

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Requests for Electronic Files 01 35 50 - 2
--	--	---

---

E-mail Address

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Requests for Electronic Files 01 35 50 - 3
--	--	---

END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Requests for Electronic Files 01 35 50 - 4
--	--	---

**SECTION 01 35 53  
SECURITY PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Security measures including formal security program, entry control, personnel identification, and miscellaneous restrictions.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 10 00 - Summary: use of premises and occupancy.
- B. Section 01 50 00 - Temporary Facilities and Controls: Temporary lighting.

**1.03 SECURITY PROGRAM**

- A. Protect Work , existing premises and District's operations from theft, vandalism, and unauthorized entry.
- B. Initiate program in coordination with District's existing security system at project mobilization.
- C. Maintain program throughout construction period until District acceptance precludes the need for Contractor security.

**1.04 ENTRY CONTROL**

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.
- C. Maintain log of workers and visitors, make available to District on request.
- D. District will control entrance of persons and vehicles related to District's operations.
- E. Contractor shall control entrance of persons and vehicles related to District's operations.
- F. Coordinate access of District's personnel to site in coordination with District's security forces.

**1.05 PERSONNEL IDENTIFICATION**

- A. Shall be worn by Contractor's superintendent and all sub contractors
- B. Provide identification badge to each person authorized to enter premises.
- C. Badge To Include: Personal photograph, name, assigned number , expiration date and employer.
- D. Maintain a list of accredited persons, submit copy to District on request.
- E. Special badges shall be issued to construction personnel when term of construction exceeds six months.
- F. Require return of badges at expiration of their employment on the Work.

**1.06 RESTRICTIONS**

- A. Do not allow cameras on site or photographs taken except by written approval of District.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Security Procedures 01 35 53 - 1
--	--	-------------------------------------

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Security Procedures 01 35 53 - 2
--	--	-------------------------------------

**SECTION 01 40 00  
QUALITY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Contractor Quality assurance submittals.
- B. Quality assurance.
- C. References and standards.
- D. Inspection agencies and services.
- E. Contractor's construction-related professional design services.
- F. Contractor's design-related professional design services.
- G. Control of installation.
- H. Tolerances.
- I. Manufacturers' field services.
- J. Defect Assessment.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 30 00 - Administrative Requirements: Submittal procedures.
- B. Section 01 41 00 - Regulatory Requirements: Compliance with applicable codes, ordinances and standards.
- C. Section 01 45 33 - Code-Required Special Inspections: Testing laboratory services and inspections required by Division of the State Architect (DSA), during the course of construction.
- D. Section 01 60 00 - Product Requirements: Requirements for material and product quality.
  - 1. Product options, substitutions, transportation and handling requirements, storage and protection requirements, and system completeness requirements.

**1.03 REFERENCE STANDARDS**

- A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants.
- B. ASTM C1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation.
- C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry.
- D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
- F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 1
--	--	--------------------------------------

- G. ASTM E699 - Standard Specification for Agencies Involved in Testing, Quality Assurance, and Evaluating of Manufactured Building Components.
- H. IAS AC89 - Accreditation Criteria for Testing Laboratories.

#### **1.04 DEFINITIONS**

- A. Contractor's Quality Control Plan: Contractor's management plan for executing the Contract for Construction.

#### **1.05 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES**

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:
  - 1. Temporary sheeting, shoring, or supports.
  - 2. Temporary scaffolding.
  - 3. Temporary bracing.
  - 4. Temporary falsework for support of spanning or arched structures.
  - 5. Temporary stairs or steps required for construction access only.
  - 6. Temporary hoist(s) and rigging.
  - 7. Investigation of soil conditions to support construction equipment.

#### **1.06 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES**

- A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.
- B. Base design on performance and/or design criteria indicated in individual specification sections.
- C. Scope of Contractor's Professional Design Services: Provide for the following items of work:
  - 1. Concrete Mix Design: As described in Section 03 30 00 - Cast-in-Place Concrete. No specific designer qualifications are required.

#### **1.07 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Designer's Qualification Statement: Submit for Architect's knowledge as contract administrator, or for District's information.
  - 1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.
    - a. Full name.
    - b. Professional licensure information.
    - c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 2
--	--	--------------------------------------



- C. Quality Control Submittals Schedule
  - 1. Schedule Format: Include quality control submittals on Submittals Schedule specified in accordance with General Conditions
  - 2. Schedule Content: List all tests, inspections and reports specified to be submitted, indicating submittal number, submittal type (field test, field inspection, fabrication inspection, etcetera), scheduled date of quality control activity and date report should be made.
- D. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for District's information.
  - 1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.
  - 2. Include required product data and shop drawings.
  - 3. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.
  - 4. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.
- E. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test/inspection.
    - h. Date of test/inspection.
    - i. Results of test/inspection.
    - j. Compliance with Contract Documents.
    - k. When requested by Architect, provide interpretation of results.
  - 2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents, or for District's information.
- F. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 3
--	--	--------------------------------------

1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- G. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the District's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- H. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for District.
1. Submit report in duplicate within 30 days of observation to Architect for information.
  2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in the Contract Documents.

## 1.08 QUALITY ASSURANCE

- A. Testing Agency Qualifications:
1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  3. Qualification Statement: Provide documentation showing testing laboratory is approved by Division of the State Architect.
  4. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.
- B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in California.
- C. Contractor's Quality Control (CQC) Plan:
1. Prior to start of work, submit a comprehensive plan describing how contract deliverables will be produced. Tailor CQC plan to specific requirements of the project. Include the following information:
    - a. Management Structure: Identify personnel responsible for quality. Include a chart showing lines of authority.
      - 1) Include qualifications (in resume form), duties, responsibilities of each person assigned to CQC function.
    - b. Management Approach: Define, describe, and include in the plan specific methodologies used in executing the work.
      - 1) Management and control of documents and records relating to quality.
      - 2) Communications.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 4
--	--	--------------------------------------

- 3) Coordination procedures.
- 4) Resource management.
- 5) Process control.
- 6) Inspection and testing procedures and scheduling.
- 7) Control of noncomplying work.
- 8) Tracking deficiencies from identification, through acceptable corrective action, and verification.
- 9) Control of testing and measuring equipment.
- 10) Project materials certification.
- 11) Managerial continuity and flexibility.
- c. District will not make a separate payment for providing and maintaining a Quality Control Plan. Include associated costs in Bid price.
- d. Acceptance of the plan is required prior to start of construction activities not including mobilization work. District's acceptance of the plan will be conditional and predicated on continuing satisfactory adherence to the plan. District reserves the right to require Contractor to make changes to the plan and operations, including removal of personnel, as necessary, to obtain specified quality of work results.
- D. Quality-Control Personnel Qualifications. Engage a person with requisite training and experience to implement and manage quality assurance (QA) and quality control (QC) for the project.

#### **1.09 REFERENCES AND STANDARDS**

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Comply with reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from Contract Documents by mention or inference otherwise in any reference document.

#### **1.10 REGULATORY REQUIREMENTS FOR TESTING AND INSPECTION**

- A. Inspections, testing and approvals as required by authorities having jurisdiction. Refer to Section 01 41 00 - Regulatory Requirements and Section 01 45 33 - Code-Required Special Inspections.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 5
--	--	--------------------------------------

- B. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting and finishing Work.
- C. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.

#### **1.11 TESTING AND INSPECTION AGENCIES AND SERVICES**

- A. District will employ and pay for services of an independent testing agency approved by DSA to perform specified testing.
- B. As indicated in individual specification sections, District or Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- C. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- D. Contractor Employed Agency:
  - 1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM E699, ASTM C1021, ASTM C1077, ASTM C1093, ASTM D3740, and DSA.
  - 2. Laboratory Qualifications: Accredited by IAS according to IAS AC89.
  - 3. Laboratory: Authorized to operate in California.
  - 4. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
  - 5. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 CONTRACTOR'S QUALITY ASSURANCE**

- A. Quality Requirements: Work shall be accomplished in accordance with quality requirements of the Drawings and Specifications, including, by reference, all Codes, laws, rules, regulations and standards. When no quality basis is prescribed, the quality shall be in accordance with the best accepted practices of the construction industry for the locale of the Project, for projects of this type.
- B. Quality Control Personnel: Contractor shall employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 6
--	--	--------------------------------------

### 3.02 CONTROL OF INSTALLATION

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects and fit for the intended use.
- B. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- C. Comply with manufacturers' instructions, including each step in sequence.
- D. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- E. Comply with specified standards as minimum quality for the work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- F. Have work performed by persons qualified to produce required and specified quality.
- G. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- H. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.
- I. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements.
- J. Protection of Existing and Completed Work: Take all measures necessary to preserve and protect existing and completed Work free from damage, deterioration, soiling and staining, until Acceptance by the District.
- K. Verification of Quality: Work shall be subject to verification of quality by District, or Architect in accordance with provisions of the General Conditions of the Contract.
  - 1. Contractor shall cooperate by making Work available for inspection by District, Architect or their designated representatives.
  - 2. Such verification may include mill, plant, shop, or field inspection as required.
  - 3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.
  - 4. Provide all information and assistance as required, including that by and from subcontractors, installers, fabricators, materials suppliers and manufacturers, for verification of quality by District, or Architect.
  - 5. Contract modifications, if any, resulting from such verification activities shall be governed by applicable provisions in the General Conditions.

### 3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 7
--	--	--------------------------------------

### 3.04 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Testing Agency Duties:
  - 1. Test samples of mixes submitted by Contractor.
  - 2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  - 3. Perform specified sampling and testing of products in accordance with specified standards.
  - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 5. Promptly notify Architect and Contractor of observed irregularities or non-compliance of Work or products.
  - 6. Perform additional tests and inspections required by Architect.
  - 7. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
  - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  - 2. Agency may not approve or accept any portion of the Work.
  - 3. Agency may not assume any duties of Contractor.
  - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
  - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
  - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
  - 3. Provide incidental labor and facilities:
    - a. To provide access to Work to be tested/inspected.
    - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
    - c. To facilitate tests/inspections.
    - d. To provide storage and curing of test samples.
  - 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
  - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  - 6. Arrange with District's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  - 7. Inspections and Tests by Authorities Having Jurisdiction:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 8
--	--	--------------------------------------

- a. Contractor shall cause all tests and inspections to be made for Work under this Contract, as required by Building Departments, Department of Public Works, Fire Department, Health Department and similar agencies having jurisdiction.
  - b. Excepted as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.
- 8. Inspections and Tests by Serving Utilities:
  - a. Contractor shall cause all tests and inspections required by serving utilities to be made for Work under this Contract.
  - b. Scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.
- E. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- F. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

### 3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect 30 days in advance of required observations.
  - 1. Observer subject to approval of Architect.
  - 2. Observer subject to approval of District.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

### 3.06 FIELD QUALITY CONTROL SUBMITTALS

- A. Administration: Make all submittals to the Architect, unless otherwise directed.
- B. Submittal Identification: Identify each submittal by Specification Section number followed by a number indicating sequential submittal for that Section. Coordinate submittal numbers with submittals specified in Section 01 30 00 - Administrative Requirements.
  - 1. Resubmittals shall use same number as original submittal, followed by a letter indicating sequential resubmittal.

03 30 00 - 1	First submittal for Section 03 30 00 - Cast in Place Concrete.
03 30 00 - 2	Second submittal for Section 03 30 00 - Cast in Place Concrete.
03 30 00 - 2A	Resubmittal of second submittal for Section 03 30 00 - Cast in Place Concrete.
03 30 00 - 2B	Second resubmittal of second submittal for Section 03 30 00 - Cast in Place Concrete.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 9
--	--	--------------------------------------

- C. Project Identification: Title each submittal with Project name, submittal date and Architect's Project number.
- D. Copies: Provide PDF copies electronically transmitted or submit 6 copies, minimum, of reports of quality control reports on dry-process xerographic copies only.
- E. Contractor's Review:
  - 1. Submittals shall be made in accordance with requirements specified herein and in individual Sections.
  - 2. Indicate clearly on each submittal the specified or referenced values for each quality control activity and the values obtained.
  - 3. Note clearly and sign each submittal certifying that reported quality control activity "Conforms" or "Does Not Conform".
- F. Changes and Deviations:
  - 1. Identify all deviations from requirements of Drawings and Specifications.
  - 2. Changes in the Work shall not be authorized by submittals review actions.
  - 3. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work.
  - 4. Changes shall only be authorized by separate written Change Order or Construction Change Directive, in accordance with the General Conditions and 01 20 00 - Price and Payment Procedures.
- G. Record Submittals: When record submittals are specified, submit three copies or sets only. Record submittals will not be reviewed but will be retained for historical and maintenance purposes.
- H. Unsolicited Submittals: Unsolicited submittals will be returned unreviewed.

### 3.07 ARCHITECT'S REVIEW

- A. General:
  - 1. Submitted Report review by Architect and Architect's consultants shall be only for general conformance with the design concept and requirements based on the information presented.
  - 2. Neither Architect nor Architect's consultants shall verify submitted quality control data.
- B. Contract Requirements:
  - 1. Review by Architect and Architect's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications.
  - 2. Changes shall only be authorized by separate written Change Order or Construction Change Directive, in accordance with the General Conditions and 01 20 00 - Price and Payment Procedures.
- C. Observations by Architect and Architect's Consultants: Periodic and occasional observations of Work in progress will be made by Architect and Architect's consultants as deemed necessary to review progress of Work and general conformance with design intent.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 10
--	--	---------------------------------------



### 3.08 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements, at no change in Contract Sum or Contract Time.
- B. If, in the opinion of Architect, it is not practical to remove and replace the work, Architect will direct an appropriate remedy or adjust payment.
- C. Architect's Acceptance and Rejection of Work: Architect reserves the right to reject all Work not in conformance to the requirements of the Drawings and Specifications.
- D. Acceptance of Non-Conforming Work: Acceptance of non-conforming Work, without specific written acknowledgement and approval of the District, shall not relieve the Contractor of the obligation to correct such Work.
  - 1. Acceptance of structurally related non-conforming work shall be submitted to DSA for review and approval.
- E. Contract Adjustment for Non-conforming Work:
  - 1. Should Architect or District determine that it is not feasible or in District's interest to require non-conforming Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between District and Contractor.
  - 2. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with applicable provisions of the General Conditions.
- F. Non-Responsibility for Non-Conforming Work: Architect and Architect's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.

### END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Quality Requirements 01 40 00 - 11
--	--	---------------------------------------

**SECTION 01 41 00  
REGULATORY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 AUTHORITY AND PRECEDENCE OF CODES, ORDINANCES AND STANDARDS**

- A. Authority: All codes, ordinances and standards referenced in the Drawings and Specifications shall have the full force and effect as though printed in their entirety in the Specifications.
- B. Precedence:
  - 1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements take precedence.
  - 2. Where the Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, the Drawings and Specifications take precedence so long as such increase is legal.
  - 3. Where no requirements are identified in the Drawings or Specifications, comply with all requirements of applicable codes, ordinances and standards of authorities having jurisdiction.
- C. Applicable Codes, Laws and Ordinances: Refer also to Section 01 10 00 - Summary, regarding permits and licenses.
  - 1. Performance of the Work is to be governed by all applicable laws, ordinances, rules and regulations of Federal, State and local governmental agencies and jurisdictions having authority over the Project, including accessibility requirements.
  - 2. Performance of the Work shall be accomplished in conformance with all rules and regulations of public utilities, utility districts and other agencies serving the development.
  - 3. Where such laws, ordinances, rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the execution date of the Agreement.
- D. Applicable Building Codes: References on the Drawings or in the Specifications to "code" or "building code" not otherwise identified shall mean the codes specified below, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction having authority over the Project.
- E. Performance of the Work shall meet or exceed the minimum regulatory requirements applicable to this project as summarized in this section, as adopted by Division of the State Architect:
  - 1. Part 1, Title 24 CCR - 2022 California Administrative Code.
  - 2. Part 2, Title 24 CCR - 2019 California Building Code (CBC); Volumes 1 and 2.
    - a. Based on ICC (IBC) - ICC International Building Code, 2018.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Regulatory Requirements 01 41 00 - 1
--	--	---

3. Part 3, Title 24 CCR - 2019 California Electrical Code (CEC, NFPA 70-NEC 2017).
  4. Part 4, Title 24 CCR - 2019 California Mechanical Code (CMC).
    - a. Based on IAPMO (UMC) - Uniform Mechanical Code, 2018.
  5. Part 5, Title 24 CCR - 2019 California Plumbing Code (CPC).
    - a. Based on IAPMO (UPC) - Uniform Plumbing Code, 2018.
  6. Part 6, Title 24 CCR - 2019 California Energy Code.
  7. Part 9, Title 24 CCR - 2019 California Fire Code (CFC).
    - a. Based on ICC (IFC) - International Fire Code; 2018.
  8. Part 10, Title 24 CCR - 2019 California Existing Buildings Code.
    - a. Based on ICC (IEBC) - ICC International Existing Buildings Code, 2018.
  9. Part 11, Title 24 CCR - 2019 California Green Building Standards Code (CalGreen).
  10. Part 12, Title 24 CCR - 2019 California Referenced Standards Code.
- F. Erosion and Sedimentation Control Regulations:
1. California Codes and Regulations; Title 24, California Building Code, Parts 1 & 2.
  2. State of California State Water Resources Control Board Regulations.
  3. EPA (NPDES) - National Pollutant Discharge Elimination System (NPDES), Construction General Permit; current edition.
- G. Maintain on site during construction, a copy of California Codes and Regulations; Title 24, California Building Code, Parts 1 through 5.

## 1.02 SUMMARY OF REFERENCE STANDARDS

- A. Regulatory requirements applicable to this project are the following:
- B. California Referenced Standards Code: Chapter 12-7-4 Fire Resistive Standards, for fire rated doors.
- C. National Fire Protection Association (NFPA): (Partial List of Applicable Standards)
  1. Reference CBC for applicable NFPA Standards - 2019 CBC (SFM) Chapter 35.
  2. California Electrical Code:
    - a. NFPA 70 - National Electrical Code.
  3. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2019.
- D. 28 CFR 35 - Nondiscrimination on the Basis of Disability in State and Local Government Services; Final Rule; Department of Justice.
- E. 28 CFR 36 - Nondiscrimination by Public Accommodations and in Commercial Facilities; Final Rule; Department of Justice.
- F. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines.
- G. ADA Standards - 2010 ADA Standards for Accessible Design.
- H. 29 CFR 1910 - Occupational Safety and Health Standards.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Regulatory Requirements 01 41 00 - 2
--	--	---

### **1.03 RELATED REQUIREMENTS**

A. Section 01 40 00 - Quality Requirements.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Regulatory Requirements 01 41 00 - 3
--	--	---

**SECTION 01 45 33**  
**CODE-REQUIRED SPECIAL INSPECTIONS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Division of the State Architect (DSA) Procedures for construction oversight and inspections required during the course of construction.
- B. Code-required special inspections.
  - 1. Division of the State Architect (DSA) approved testing laboratory services and inspections required during the course of construction.
- C. Testing services incidental to special inspections.
- D. Submittals.
- E. Manufacturers' field services.
- F. Fabricators' field services.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 30 00 - Administrative Requirements: Submittal procedures.
- B. Section 01 40 00 - Quality Requirements.
- C. Section 01 60 00 - Product Requirements: Requirements for material and product quality.

**1.03 DEFINITIONS**

- A. Code or Building Code: California Building Code and, more specifically, Chapter 17A - Structural Tests and Special Inspections, of same.
- B. Authority Having Jurisdiction (AHJ): Agency or individual officially empowered to enforce the building, fire and life safety code requirements of the permitting jurisdiction in which the Project is located. AHJ for this Project is Division of the State Architect.
- C. Special Inspection:
  - 1. Special inspections are inspections and testing of materials, installation, fabrication, erection or placement of components and connections mandated by the CBC that also require special expertise to ensure compliance with the approved contract documents and the referenced standards.
  - 2. Special inspections are separate from and independent of tests and inspections conducted by District or Contractor for the purposes of quality assurance and contract administration.

**1.04 REFERENCE STANDARDS**

- A. ACI 318 - Building Code Requirements for Structural Concrete.
- B. AISC 341 - Seismic Provisions for Structural Steel Buildings.
- C. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 1
--	--	---

- D. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
- E. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.
- F. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
- G. ASTM C172/C172M - Standard Practice for Sampling Freshly Mixed Concrete.
- H. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
- I. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- J. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- K. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
- L. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing.
- M. ICC-ES AC308 - Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements.

#### 1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Special Inspection Agency Qualifications: Prior to the start of work, the Special Inspection Agency is required to:
  - 1. Submit agency name, address, and telephone number, names of full time registered Engineer and responsible officer.
  - 2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
  - 3. Submit certification that Special Inspection Agency is acceptable to AHJ.
- C. Testing Agency Qualifications: Prior to the start of work, the Testing Agency is required to:
  - 1. Submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
  - 2. Submit certification that Testing Agency is acceptable to AHJ.
  - 3. Testing and inspections will be performed by an independent testing laboratory selected and employed by the District and approved by the Division of the State Architect (DSA).
    - a. Qualification of a testing agency or laboratory will be under the jurisdiction of the DSA Structural Safety Section (SSS). Procedural and acceptance criteria are set forth in the California Administrative Code (CBC) Chapter 4.
- D. Manufacturer's Qualification Statement: Manufacturer is required to submit documentation of manufacturing capability and quality control procedures. Include documentation of AHJ approval.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 2
--	--	---

- E. Fabricator's Qualification Statement: Fabricator is required to submit documentation of fabrication facilities and methods as well as quality control procedures.
- F. Distribution List: The Testing Laboratory will make the following distribution of test and inspection reports:
  - 1 District
  - 2 Architect
  - 1 Structural Engineer
  - 1 Contractor
  - 1 District's Project Inspector
  - 1 Division of the State Architect
- G. Each and every test or inspection report shall bear the File Number and Application Number assigned to this project by the DSA.
- H. DSA Form 291: From the engineering manager of the laboratory of record.
- I. Special Inspection Reports: After each special inspection, Special Inspector is required to promptly submit at least two copies of report; one to Architect and one each to the distribution list.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of Special Inspector.
    - d. Date and time of special inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of special inspection.
    - h. Date of special inspection.
    - i. Results of special inspection.
    - j. Compliance with Contract Documents.
  - 2. Final Special Inspection Report: Document special inspections and correction of discrepancies prior to the start of the work.
  - 3. Comply with DSA IR 17-12, revised 04/23/20.
- J. Fabricator Special Inspection Reports: After each special inspection of fabricated items at the Fabricator's facility, Special Inspector is required to promptly submit at least two copies of report; one to Architect and one each to the distribution list.
  - 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of Special Inspector.
    - d. Date and time of special inspection.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 3
--	--	---

- e. Identification of fabricated item and specification section.
  - f. Location in the Project.
  - g. Results of special inspection.
  - h. Verification of fabrication and quality control procedures.
  - i. Compliance with Contract Documents.
  - j. Compliance with referenced standard(s).
- K. Test Reports: After each test or inspection, promptly submit at least two copies of report; one to Architect and one each to the distribution list.
- 1. Include:
    - a. Date issued.
    - b. Project title and number.
    - c. Name of inspector.
    - d. Date and time of sampling or inspection.
    - e. Identification of product and specifications section.
    - f. Location in the Project.
    - g. Type of test or inspection.
    - h. Date of test or inspection.
    - i. Results of test or inspection.
    - j. Compliance with Contract Documents.
    - k. Test reports shall be signed by a Civil Engineer licensed in the State of California.
  - 2. Test reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory.
    - a. Samples taken but not tested shall also be reported.
    - b. Records of special sampling operations as required shall also be reported.
    - c. Reports shall show that the material or materials were sampled and tested in accordance with the requirements of the CBC, and with the approved specifications.
    - d. They shall also state definitely whether or not the material or materials tested comply with requirements.
    - e. Test reports shall be issued within 14 days of finding being known, to all parties listed above.
  - 3. At the completion of the project, Testing Laboratory shall certify in writing and on all required DSA forms, that all work specified or required to be tested and inspected conforms to drawings, specifications and applicable building codes.
  - 4. Verification of Test Reports:
    - a. The Testing Laboratory of record shall submit to the Division of the State Architect (DSA) a verified report covering all tests which are required to be made by that agency during the progress of the project.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 4
--	--	---



- 1) Such report shall be furnished each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project.
  - 2) Specific testing requirements as listed on the Structural Test and Inspections (T&I) Form DSA-103 for this project. These tests may include the following forms:
    - (a) DSA-250: Special Inspection(s).
    - (b) DSA-291: Laboratory Verified Report.
    - (c) DSA-292: Special Inspection(s) Verified Report(s).
    - (d) DSA-293: Geotechnical Verified Report.
  - 3) Other Division of the State Architect (DSA) Certification Documents (Reports) as may be required.
- b. DSA Form 292 - Special Inspection Verified Report shall be from all special inspectors contracting directly and individually with the school board.
- L. Certificates: When specified in individual special inspection requirements, Special Inspector shall submit certification by the manufacturer, fabricator, and installation subcontractor to Architect and AHJ, in quantities specified for Product Data.
1. Indicate material or product complies with or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
  2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect and AHJ.
- M. Manufacturer's Field Reports: Submit reports to Architect.
1. Submit report in duplicate within 7 days of observation to Architect for information.
  2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in Contract Documents.
- N. Fabricator's Field Reports: Submit reports to Architect and AHJ.
1. Submit report in duplicate within 30 days of observation to Architect for information.
  2. Submit for information for the limited purpose of assessing compliance with information given and the design concept expressed in Contract Documents.

#### **1.06 SPECIAL INSPECTION AGENCY**

- A. District will employ services of a Special Inspection Agency to perform inspections and associated testing and sampling in accordance with ASTM E329 and required by the building code.
- B. The Special Inspection Agency may employ and pay for services of an independent testing agency to perform testing and sampling associated with special inspections and required by the building code.
- C. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 5
--	--	---

### 1.07 TESTING AND INSPECTION AGENCIES

- A. District is to employ services of an independent inspection and testing agency to perform observation, testing and sampling associated with special inspections including those not required by the building code. CAC
  - 1. Project Inspector and testing lab are employed by the District and approved by:
    - a. A/E of Record.
    - b. Structural Engineer (when applicable).
    - c. DSA.
- B. Employment of agency in no way relieves Contractor of obligation to perform work in accordance with requirements of Contract Documents.

### 1.08 QUALITY ASSURANCE

- A. Special Inspection Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
- B. Testing Agency Qualifications:
  - 1. Independent firm specializing in performing testing and inspections of the type specified in this section.
  - 2. Testing Agency must possess DSA LEA Program acceptance.
- C. Testing and inspection services which are performed shall be in accordance with requirements of the CBC, and as specified herein. Testing and inspection services shall verify that work meets the requirements of the Construction Documents.
- D. In general, tests and inspections for structural materials shall include all items enumerated on the Structural Tests and Inspections list for this project as prepared and distributed by the Architect.
- E. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document.

### 1.09 INSPECTION BY THE DISTRICT

- A. The District shall have the right to reject materials and workmanship which are defective, or to require their correction.
  - 1. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the District.
  - 2. If the Contractor does not correct such rejected work within a reasonable time, the District may correct such rejected work and charge the expense to the Contractor.
- B. Should it be considered necessary or advisable by the District at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the completed work; the Contractor shall on request promptly furnish necessary facilities, labor and materials.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 6
--	--	---

1. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, he shall defray all expenses of such examinations and of satisfactory reconstruction. .
2. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed the Contractor.

#### **1.10 DISTRICT'S INSPECTOR**

- A. A Project Inspector (IOR) employed by the District and approved by Architect, Structural Engineer and DSA in accordance with the requirements of the California Building Code will be assigned to the work.
  1. Project Inspector duties are specifically defined in CCR Title 24 Part 1, Sec. 4-211(b), 4-219, 4-333(b), 4-336 and 4-342.
- B. The District's Inspector shall at all times have access for the purpose of inspection to all parts of the work and to the shops where the work is in preparation, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.
- C. The work of construction in all stages of progress shall be subject to the personal continuous observation of the District's Inspector.
  1. The Contractor shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials.
  2. Inspection of the work shall not relieve the Contractor from any obligation to fulfill this Contract.
  3. Inspector of Record is required to work a normal 40 hour week on this project only. Any overtime required will be at the expense of the Contractor and sub-contractor requiring the inspection.

#### **1.11 PAYMENTS**

- A. Costs of initial testing and inspection, except as specifically modified herein, or specified otherwise in technical sections, will be paid for by the District, providing such testing and inspection indicates compliance with Contract Documents. Initial tests and inspections are defined as the first tests and inspections as herein specified.
- B. In the event a test or inspection indicates failure of a material or procedure to meet requirements of Contract Documents, costs for retesting and reinspection will be paid by the District and backcharged to the Contractor.
- C. Additional tests and inspections not herein specified but requested by District or Architect, will be paid for by District, unless results of such tests and inspections are found to be not in compliance with Contract Documents, in which case the District will pay all costs for initial testing as well as retesting and reinspection and backcharge the Contractor.
- D. Costs for additional tests or inspections required because of change in materials being provided or change of source or supply will be paid by District and backcharged to the Contractor.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 7
--	--	---

- E. Costs for tests or inspections which are required to correct deficiencies will be paid by the District and backcharged to the Contractor.
- F. Cost of testing which is required solely for the convenience of Contractor in his scheduling and performance of work will be paid by the District and backcharged to the Contractor.
- G. Overtime costs for testing and inspections performed outside the regular work day hours, including weekends and holidays, will be paid for by the District and backcharged to the Contractor. Such costs include overtime costs for the District's Inspector.
- H. Testing Laboratory shall separate and identify on the invoices, the costs covering all testing and inspections which are to be backcharged to the Contractor as specified above.
- I. Testing Laboratory shall furnish to District a cost estimate breakdown covering initial tests and inspections required by Contract Documents. Estimate shall include number of tests, man-hours required for tests, field and plant inspections, travel time, and costs.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 SCHEDULE OF SPECIAL INSPECTIONS, GENERAL**

- A. Frequency of Special Inspections: Special Inspections are indicated as continuous or periodic.
  - 1. Continuous Special Inspection: Special Inspection Agency is required to be present in the area where the work is being performed and observe the work at all times the work is in progress.
  - 2. Periodic Special Inspection: Special Inspection Agency is required to be present in the area where work is being performed and observe the work part-time or intermittently and at the completion of the work.
- B. Tests and inspections for the following will be required in accordance with the current CBC, unless otherwise specified.

### **3.02 SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION (CHAPTER 17A AND 19A)**

- A. Inspection:
  - 1. Job Site Inspection: CBC 1705A.3, 1705A.3.5 (Conc. Preplacement), 1705A.3.6 (Placing Record), and 1910A.
  - 2. Batch Plant or Weighmaster Inspection: CBC 1705A.3.3.
- B. Reinforcing Steel, Including: Verify compliance with approved contract documents and ACI 318, Sections 20.2, 25.2 through 25.7, and 26.6.
  - 1. Reinforcing Bars: CBC 1901A.6; 1910A.2.
  - 2. Tests:
    - a. Tests shall be performed before the delivery of steel to Project site. Steel not meeting specifications shall not be shipped to the Project.
    - b. Testing procedure shall conform to ASTM A615/A615M or .
    - c. Sample at the place of distribution, before shipment:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 8
--	--	---

- 1) Make one tensile test and one bending test from samples out of 10 tons, or fraction thereof, of each size and kind of reinforcing steel, where taken from bundles as delivered from the mill and properly identified as to heat number.
  - 2) Mill analysis shall accompany report.
  - 3) Where identification number cannot be ascertained, or where random samples are taken, make one series of tests from each 2-1/2 tons, or fraction thereof, of each size and kind of reinforcing steel.
  - 4) Tests on unidentified reinforcing steel will be paid by the District and backcharged to the Contractor.
  - 5) Samples shall include not fewer than 2 pieces, each 18 inches long, of each size and kind of reinforcing steel.
- d. District's Inspector will inspect all reinforcement for concrete work for size, dimensions, locations and proper placement.
- C. Anchors Cast in Concrete: Verify compliance with ACI 318; periodic.
- D. Bolts Installed in Concrete: Where allowable loads have been increased or where strength design is used, verify compliance with approved Contract Documents and ICC-ES AC308 approved report prior to and during placement of concrete; continuous.
1. Comply with CBC Section 1910A.5; Table 1705A.3, items 4a & 4b, ASCE 7, Section 13.4.
- E. Anchors Post-Installed in Hardened Concrete: Verify compliance with ACI 318.
1. Comply with CBC Section 1910A.5; Table 1705A.3, items 4a & 4b, ASCE 7, Section 13.4.
  2. Adhesive Anchors: Verify horizontally or upwardly-inclined orientation installations resisting sustained tension loads - Section 17.8.2.4; continuous.
  3. Other Mechanical and Adhesive Anchors: Verify as per Chapter 17.8.2; periodic.
- F. Anchors Installed in Hardened Concrete: Verify compliance with ACI 318; periodic.
- G. Design Mix: Verify plastic concrete complies with the design mix in approved contract documents and with CBC Chapter 19A, ACI 318, Sections 26.4.3, 26.4.4; periodic.
1. Portland Cement Tests: CBC 1705A.3.2, 1910A.1.
  2. Concrete Aggregates: CBC 1705A.3.2, 1903A.5.
  3. Batch Plant Inspection: CBC 1705A.3.3.
  4. Waiver of Continuous Batch Plant Inspection and Tests: CBC 1705A.3.3.1.
  5. Admixtures: CBC 1910A.1.
  6. Proportions of Concrete: CBC 1904A (Durability) and 1905A (Modifications to ACI 318).
- H. Concrete Sampling Concurrent with Strength Test Sampling: Each time fresh concrete is sampled for strength tests, verify compliance with ASTM C172/C172M, ASTM C31/C31M and ACI 318, Chapter 26.5, 26.12, and record the following, continuous:
1. Slump.
  2. Air content.
  3. Temperature of concrete.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 9
--	--	---

4. Strength Tests of Concrete: CBC 1905A.1.15; Table 1705A.3 Item 6; ACI 318-14 Sec. 26.12.
- I. Concrete Placement: Verify application techniques comply with approved Contract Documents and ACI 318, Chapter 26.5; continuous.
- J. Specified Curing Temperature and Techniques: Verify compliance with ACI 318, Chapter 26.5.3-26.5.5; continuous.
- K. Concrete Strength in Situ: Verify concrete strength complies with approved Contract Documents, CBC Table 1705A.3, 1905A.1.15, and modified ACI 318, Chapter 26.12.2,1(a).
- L. Formwork Shape, Location and Dimensions: Verify compliance with approved Contract Documents and ACI 318, Chapter 26.11.1.2(b); continuous.
- M. Materials: If the Contractor cannot provide sufficient data or documentary evidence that concrete materials conform to the quality standards of ACI 318, the AHJ will require that the Special Inspector verify compliance with the appropriate standards and criteria in ACI 318, Chapter 3. CBC 1705A3.
- N. District Inspector (IOR) will do the following:
  1. Inspect placing of reinforcing steel and concrete at Project.
  2. Obtain weighmaster's certificate and identify mix before accepting each load.
  3. Keep daily record of concrete placement, identifying each truck load, time of receipt, and location of concrete in structure.
  4. Keep record until completion of Project and make available for inspection by DSA Field Engineer or representative.
  5. See also subparagraph on Waiver of Continuous Batch Plant Inspection above.
  6. During progress of work, take an additional number of test cylinders as directed by Architect. Conform to CBC 1905A.1.15 (modified ACI 318). Test cylinders need not be made for concrete used in exterior flatwork.
    - a. ACI 318 Section 26.12.2.1 shall be replaced and the Contractor shall comply with the following:
      - 1) Samples for strength test of each class of concrete placed each day shall not be taken less than once for each 50 cubic yards (38.3m<sup>3</sup>) of concrete, or not less than once for each 2,000 square feet (186 m<sup>2</sup>) of surface area of for slabs or walls.
      - 2) Additional samples for seven day compressive strength tests shall be taken for each class of concrete at the beginning of the concrete work or whenever the mix or aggregate is changed.
  7. One set of cylinders shall consist of 4 samples all taken from same batch, one to be tested at age of 7 days and two at 28 days.
  8. Make and store cylinders according to ASTM C31/C31M.
  9. Deliver cylinders to laboratory or store cylinders in a suitable protected environment for pick up by laboratory personnel.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 10
--	--	--

10. Make slump test of wet concrete according to test for slump of portland cement concrete, ASTM C143/C143M, at least at the same frequency that the cylinders are taken.

### 3.03 SPECIAL INSPECTIONS FOR SOILS

- A. Materials and Placement: Verify each item below complies with approved construction documents and approved geotechnical report.
  1. Design bearing capacity of material below shallow foundations; periodic.
  2. Design depth of excavations and suitability of material at bottom of excavations; periodic.
  3. Materials, densities, lift thicknesses; placement and compaction of backfill: continuous.
  4. Subgrade, prior to placement of compacted fill verify proper preparation; periodic.
- B. Testing: Classify and test excavated material; periodic.
- C. Excavations, Foundations and Retaining Walls (Chapters 17A, 18A, and 33):
  1. Earth Compaction: CBC 1705A.6; Table 1705A.6, continuous; 1804A.6.
  2. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of compacted fill: CBC 1705A.6.1; Table 1705A.6, periodic; 1804A.6.
- D. The Geotechnical Engineer of record or a Geotechnical Engineer selected by the District will provide continuous inspection of fill and will field test fill and earth backfill as placed and compacted, and inspect excavations and subgrade before concrete is placed and provide periodic inspection of open excavations, embankments, and other cuts or vertical surfaces of earth.
  1. The Geotechnical Engineer will submit a Verified Report indicating observations, tested fills, and opinion the fills were placed in accordance with the project specifications.
- E. Contractor shall remove unsatisfactory material, re-roll, adjust moisture, place new material, or in the case of excavations, provide proper protective measures, perform other operations necessary, as directed by the Geotechnical Engineer whose decisions and directions will be considered final.
- F. Soils Test and Inspection Procedure:
  1. Allow sufficient time for testing, and evaluation of results before material is needed. The Geotechnical Engineer shall be sole and final judge of suitability of all materials.
  2. Laboratory compaction tests to be used will be in accordance with ASTM D1557.
  3. Field density tests will be made in accordance with ASTM D1556/D1556M.
  4. Number of tests will be determined by Geotechnical Engineer. Materials in question may not be used pending test results.
  5. Excavation and embankment inspection procedure. Geotechnical Engineer will visually or otherwise examine such areas for bearing values, cleanliness and suitability.
  6. Earthwork Test Reports: In order to avoid misinterpretations by the reviewing agencies, all retest results shall be reported on the same sheet, immediately following the previous failure test to which it is related. Retests shall be clearly noted as such.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 11
--	--	--

### **3.04 SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE**

- A. Seismic Force-Resisting Systems: Comply with the quality assurance plan requirements of AISC 341.
- B. Inspection: Comply with CBC 1705A.12.
- C. Testing: Comply with CBC 1705A.13.
- D. Designated Seismic System Verification: Verify label, anchorage or mounting complies with certificate of compliance provided by manufacturer or fabricator.
- E. Structural Testing for Seismic Resistance:
  - 1. Concrete reinforcement: Comply with ACI 318, Section 20.2.2.5 and 21.1.52.
    - a. Materials Obtain mill certificates demonstrating compliance with ASTM A615/A615M; periodic.
    - b. Welding: Perform chemical tests complying with ACI 318, Section 26.6.4 to determine weldability; periodic.
  - 2. Structural Steel: Comply with the quality assurance requirements of AISC 341.
  - 3. Non-Structural Components:
    - a. General Design Requirements: Obtain manufacturer certification of compliance with requirements of ASCE 7, Section 13.2.1; periodic.
    - b. Designated Seismic Force-Resisting Non-Structural System Components: Obtain manufacturer certification of compliance with ASCE 7, Section 13.2.2; periodic.
- F. Structural Observations for Seismic Resistance: Visually observe structural system for general compliance with the approved Contract Documents; periodic.

### **3.05 SPECIAL INSPECTIONS FOR WIND RESISTANCE**

- A. Wind Resisting Components:
  - 1. Roof covering, roof deck, and floor framing connections; periodic.
  - 2. Exterior wall covering and wall connections to roof and floor diaphragms and framing; periodic.

### **3.06 STRUCTURAL OBSERVATIONS FOR STRUCTURES**

- A. Provide Observations: For structure where one or more of the following conditions exist:
  - 1. Such observation is required by the registered design professional responsible for the structural design.
  - 2. Such observation as specifically required by AHJ.

### **3.07 SPECIAL INSPECTION AGENCY DUTIES AND RESPONSIBILITIES**

- A. Special Inspection Agency shall:
  - 1. Verify samples submitted by Contractor comply with the referenced standards and the approved Contract Documents.
  - 2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 12
--	--	--



3. Perform specified sampling and testing of products in accordance with specified reference standards.
  4. Ascertain compliance of materials and products with requirements of Contract Documents.
  5. Promptly notify Architect, SEOR, IOR, DSA, District and Contractor of observed irregularities or non-conformance of work or products.
  6. Perform additional tests and inspections required by Architect.
  7. Attend preconstruction meetings and progress meetings.
  8. Submit reports of all tests or inspections specified.
- B. Limits on Special Inspection Agency Authority:
1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  2. Agency may not approve or accept any portion of the work.
  3. Agency may not assume any duties of Contractor.
  4. Agency has no authority to stop the work.
- C. Re-testing required because of non-compliance with specified requirements shall be performed by the same agency on instructions by Architect.
- D. Re-testing required because of non-compliance with specified requirements shall be paid for by Contractor.

### **3.08 TESTING AGENCY DUTIES AND RESPONSIBILITIES**

- A. Testing Agency Duties:
1. Test samples submitted by Contractor.
  2. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
  3. Perform specified sampling and testing of products in accordance with specified standards.
  4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  5. Promptly notify Architect and Contractor of observed irregularities or non-compliance of work or products.
  6. Perform additional tests and inspections required by Architect.
  7. Attend preconstruction meetings and progress meetings.
  8. Submit reports of all tests or inspections specified.
- B. Limits on Testing or Inspection Agency Authority:
1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  2. Agency may not approve or accept any portion of the work.
  3. Agency may not assume any duties of Contractor.
  4. Agency has no authority to stop the work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 13
--	--	--

- C. Immediately upon determination of a test failure, the Laboratory shall telephone the results to the Architect. On the same day, Laboratory shall send test results by email to the Architect and to all relevant responsible parties of the project team, and District's Inspector
- D. On instructions by Architect, perform re-testing required because of non-compliance with specified requirements, using the same agency.
- E. Contractor will pay for re-testing required because of non-compliance with specified requirements.
- F. At the completion of the project, Testing Laboratory shall certify in writing and on all required DSA forms, that all work specified or required to be tested and inspected conforms to drawings, specifications and applicable building codes.
  - 1. See DSA Procedure PR 13-01.
- G. Duties of the Laboratory of Record related to the use of form DSA 152 are as follows:
  - 1. Meet with the Project Inspector, design professionals, and contractor as needed to mutually communicate and understand the testing and inspection program and the methods of communication appropriate for the project.
  - 2. Obtain a copy of the DSA approved construction documents from the design professional in general responsible charge prior to the commencement of construction
  - 3. Obtain a copy of the DSA approved Statement of Structural Tests and Special Inspections (form DSA 103) from the design professional in general responsible charge prior to the commencement of construction.
  - 4. Report all project related activities to the Project Inspector. The Project Inspector is responsible for monitoring the work of the Laboratory of Record and Special Inspectors to ensure the testing and special inspection program is satisfactorily completed
  - 5. Provide material testing as identified in the DSA approved construction documents.
  - 6. Submit test reports to the Project Inspector on the day the tests were performed for any tests performed on-site
  - 7. Submit material test reports in a timely manner such that construction is not delayed and not to exceed 14 days from the date the material tests were performed. Test reports are to be submitted to DSA, the Architect, structural engineer, Project Inspector and school district.
    - a. As a convenience, and if agreed upon by involved parties, the test reports may be submitted electronically as identified in Section 4 of this procedure.
  - 8. Immediately submit reports of material tests not conforming to the requirements of the DSA approved construction documents. These reports shall be submitted to the DSA, Architect, structural engineer, Project Inspector and school district.
  - 9. The Engineering Manager shall submit an interim Laboratory of Record Verified Report (form DSA 291) and the Geotechnical Engineer shall submit an interim Geotechnical Verified Report (form DSA 293) to DSA, the project inspector, school district and the Design Professional in General Responsible Charge.
    - a. The reports are required to be submitted upon any of the following events occurring:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 14
--	--	--

- 1) Within 14 days of the completion of the material testing/special inspection program.
  - 2) Work on the project is suspended for a period of more than one month.
  - 3) The services of the laboratory of record are terminated for any reason prior to completion of the project.
  - 4) The DSA requests a Verified Report. (See interim verified reports below. This is a "DSA request.")
10. The Engineering Manager shall submit an interim verified report (form DSA 291) and the Geotechnical Engineer shall submit form DSA 293 to DSA and a copy to the project inspector for each of the applicable sections of the form DSA 152, prior to the project inspector signing off that section of the project inspection card, if that section required material testing. The sections are:
- a. Initial Site Work
  - b. Foundation Prep
  - c. Vertical Framing
  - d. Horizontal Framing
  - e. Appurtenances
  - f. Finish Site Work
  - g. Other Work
  - h. Final
- H. Duties of Special Inspectors, employed by the Laboratory of Record, related to the use of form DSA 152 are as follows:
1. Meet with the Project Inspector, design professionals, and contractor as needed to mutually communicate and understand the testing and inspection program and the methods of communication appropriate for the project.
  2. Report all project related activities to the Project Inspector. The Project Inspector is responsible for monitoring the work of the Laboratory of Record and Special Inspectors to ensure the testing and special inspection program is satisfactorily completed.
  3. Perform work under the supervision of the Engineering Manager for the Laboratory of Record
  4. Perform inspections in conformance with the DSA approved construction documents, applicable codes and code reference standards
  5. Prepare detailed daily inspection reports outlining the work inspected and provide the Project Inspector a copy of the reports on the same day the inspections were performed.
  6. Prepare detailed daily inspection reports outlining the work inspected and provide the Project Inspector a copy of the reports on the same day the inspections were performed.
  7. Immediately submit reports of materials or work not conforming to the requirements of the DSA approved construction documents. These reports shall be submitted to the DSA, Architect, structural engineer, Project Inspector and school district.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 15
--	--	--

8. Submit daily special inspection reports in a timely manner such that construction is not delayed and not to exceed 14 days from the date the special inspections were performed. The reports are to be submitted to the Architect, structural engineer, Project Inspector and school district.
9. Submit Verified Report forms DSA 292 to the DSA, Project Inspector, district and design professional in responsible charge.
10. The reports are required to be submitted upon any of the following events occurring:
  11. Within 14 days of the completion of the special inspection work.
  12. Work on the project is suspended for a period of more than one month.
  13. The services of the special inspector are terminated for any reason prior to completion of the project.
  14. The DSA requests a Verified Report. (See interim verified reports below. This is a "DSA request")
  15. Submit an interim Verified Report (form DSA 292) to the DSA and a copy to the Project Inspector for each of the applicable sections of the form DSA 152, prior to the Project Inspector signing off that section of the project inspection card, if that section required special inspections. The sections are:
    - a. Initial Site Work
    - b. Foundation
    - c. Vertical Framing
    - d. Horizontal Framing
    - e. Appurtenances
    - f. Non-Building Site Structures
    - g. Finish Site Work
    - h. Other Work
    - i. Final
  16. The Verified Reports shall be sent electronically to the DSA.
- I. Duties of Special Inspectors, not employed by the Laboratory of Record, related to the use of form DSA 152 are as follows:
  1. Meet with the project inspector, Laboratory of Record, the design professionals, and the contractors as needed to mutually communicate and understand the testing and inspection program, and the methods of communication appropriate for the project.
  2. Report all project related activities to the project inspector. The project inspector is responsible for monitoring the work of the Laboratory of Record and special inspectors to ensure the testing and special inspection program is satisfactorily completed.
  3. Perform work under the direction of the design professional in general responsible charge, as defined in Section 4-335(f)1B of the California Administrative Code (Title 24, Part 1).
  4. Perform inspections in conformance with the DSA approved construction documents, applicable codes and code reference standards.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 16
--	--	--

5. Prepare detailed daily inspection reports outlining the work inspected and provide the project inspector a copy of the reports on the same day the inspections were performed.
6. Immediately submit reports of materials or work not conforming to the requirements of the DSA approved construction documents. These reports shall be submitted to DSA, the Architect, structural engineer, project inspector and the school district.
7. Submit daily special inspection reports in a timely manner such that construction is not delayed and not to exceed 14 days from the date the special inspections were performed. The reports are to be submitted to DSA, the Architect, structural engineer, project inspector and the school district.
8. Submit Special Inspection Verified Report forms DSA 292 to DSA, the project inspector, the school district and the Design Professional in General Responsible Charge.
  - a. The reports are required to be submitted upon any of the following events occurring:
    - 1) Within 14 days of the completion of the special inspection work.
    - 2) Work on the project is suspended for a period of more than one month.
    - 3) The services of the special inspector are terminated for any reason prior to completion of the project.
    - 4) DSA requests a verified report. (See interim verified reports below. This is a "DSA request.")
9. Submit an interim Special Inspection Verified Report (form DSA 292) to DSA and a copy to the project inspector for each of the applicable sections of the form DSA 152, prior to the project inspector signing off that section of the project inspection card, if that section required special inspections.
  - a. The sections are:
    - 1) Initial Site Work
    - 2) Foundation Prep
    - 3) Vertical Framing
    - 4) Horizontal Framing
    - 5) Appurtenances
    - 6) Finish Site Work
    - 7) Other Work
    - 8) Final

### 3.09 CONTRACTOR DUTIES AND RESPONSIBILITIES

#### A. DSA Requirements:

1. Each Multi-Prime Contractor or Subcontractor shall comply with DSA Construction Oversight Procedure PR 13-01. California Code of Regulations (CCR), Title 24, Part 1, CCR, Chapter 4, Article 1 (Sections 4-211 through 4-220) and Group1, Articles 5 and 6 (Sections 4-331 through 4-344) which provide regulations governing the construction process for projects under the jurisdiction of the Division of the State Architect (DSA).

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 17
--	--	--

- a. Assist the Project Inspector (IOR) and complete and fill out the following forms during the course of construction.
  - 1) Form-102-IC: Construction Start Notice/ Inspection Card Request: Verify Project Inspector has an active form issued by DSA.
  - 2) Form-151: Project Inspector Notifications: Contractor to notify IOR and assist.
  - 3) Form-152: Project Inspection Card: See below.
  - 4) Form-154: Notice of Deviations/ Resolution of Deviations: Contractor to verify all deviations are reviewed, corrected, and accepted by the design professional, and filed with DSA through the Project Inspector (IOR).
    - (a) When the Project Inspector identifies deviations from the DSA approved construction documents the inspector must verbally notify the contractor. If the deviations are not corrected within a reasonable time frame, the inspector is required to promptly issue a written notice of deviation to the contractor, with a copy sent to the design professional in general responsible charge and the DSA.
    - (b) When the noticed deviations are corrected, the inspector is required to promptly issue a written notice of resolution to the contractor, with a copy sent to the design professional in general responsible charge and the DSA.
    - (c) Deviations include both construction deviations and material deficiencies.
    - (d) The written notice of deviations shall be made using form DSA 154.
    - (e) The notice of resolution of deviations shall be made using the original form DSA 154 that reported the deviations.
  - 5) Form-156: Commencement/Completion of Work Notification
  - 6) Form-6.C: Verified Report – Contractor: From each contractor having a contract with the school board.
2. Duties of Contractor related to the use of form DSA 152 are as follows:
  - a. The Contractor shall carefully study the DSA approved documents and shall plan a schedule of operations well ahead of time.
  - b. If at any time it is discovered that work is being done which is not in accordance with the DSA approved construction documents, the Contractor shall correct the work immediately.
  - c. Verify that forms DSA 152 are issued for the project prior to the commencement of construction.
  - d. Meet with the design team, the Laboratory of Record and the Project Inspector to mutually communicate and understand the testing and inspection program and the methods of communication appropriate for the project.
  - e. Notify the Project Inspector, in writing, of the commencement of construction of each and every aspect of the work at least 48 hours in advance by submitting form DSA 156 (or other agreed upon written documents) to the Project Inspector.
  - f. Notify the Project Inspector of the completion of construction of each and every aspect of the work by submitting form DSA 156 (or other agreed upon written documents) to the Project Inspector.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 18
--	--	--

- g. Consider the relationship of the signed off blocks and sections of the form DSA 152 and the commencement of subsequent work. Until the Project Inspector has signed off applicable blocks and sections of the form DSA 152, the Contractor may be prohibited from proceeding with subsequent construction activities that cover up the unapproved work. Any subsequent construction activities, that cover up the unapproved work, will be subject to a "Stop Work Order" from the DSA or the district and are subject to removal and remediation if found to be in non-compliance with the DSA approved construction documents.
- h. Submit the final verified report. All prime contractors are required to submit final Contractor Verified Reports (form DSA 6-C) to DSA and the project inspector.
  - 1) The reports are required to be submitted upon any of the following events occurring:
    - (a) The project is substantially complete. DSA considers the project to be complete when the construction is sufficiently complete in accordance with the DSA approved construction documents so that the owner can occupy or utilize the project.
    - (b) Work on the project is suspended for a period of more than one month.
    - (c) The services of the contractor are terminated for any reason prior to the completion of the project.
    - (d) DSA requests a verified report.

**B. Contractor Responsibilities, General:**

- 1. Deliver to agency at designated location, adequate samples of materials for special inspections that require material verification.
- 2. Availability of Samples
  - a. Contractor shall make materials required for testing available to Laboratory and assist in acquiring these materials as directed by the District's Inspector. The samples shall be taken under the immediate direction and supervision of the Testing Laboratory or District's Inspector.
  - b. If work which is required to be tested or inspected is covered up without prior notice or approval, such work may be uncovered at the discretion of Architect at no additional cost to the District. Refer to paragraph "Payments" herein.
  - c. Unless otherwise specified, Contractor shall notify Testing Laboratory a minimum of 10 working days in advance of all required tests, and a minimum of 2 working days in advance of all required inspections. All extra expenses resulting from a failure to notify the Laboratory will be paid by the District and backcharged to the Contractor.
  - d. Contractor shall give sufficient advance notice to Testing Laboratory in the event of cancellation or time extension of a scheduled test or inspection. Charges due to insufficient advance, notice of cancellations, or time extension will be paid for by the District and backcharged to the Contractor.
- 3. Cooperate with agency and laboratory personnel; provide access to approved documents at project site, to the work, to manufacturers' facilities, and to fabricators' facilities.
- 4. Provide incidental labor and facilities:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 19
--	--	--

- a. To provide access to work to be tested or inspected.
  - b. To obtain and handle samples at the site or at source of Products to be tested or inspected.
  - c. To facilitate tests or inspections.
  - d. To provide storage and curing of test samples.
5. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing or inspection services.
  6. Arrange with District's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
  7. The Contractor shall notify the District's Inspector a minimum of 5 working days in advance of the manufacture of material to be supplied by him under the Contract Documents, which must be by terms of the Contract be tested, in order that the District may arrange for the testing of such material at the source of supply.
  8. Material shipped by the Contractor from the source of supply before having satisfactorily passed such testing and inspection or before the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Project.
  9. The District will select and pay testing laboratory costs for all tests and inspections, but may be reimbursed by the Contractor for such costs under the Contract conditions. Any direct payments by the Contractor to the testing laboratory on this project is prohibited.
- C. Contractor shall submit a written statement of responsibility to comply with CBC section 1704A.4.
1. Each contractor responsible for the construction of a main wind- or seismic-force-resisting system, designated seismic system or a wind- or seismic-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:
    - a. Acknowledgment of awareness of the special requirements contained in the statement of special inspections;
    - b. Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official;
    - c. Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports; and
    - d. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.
- D. Contractor Responsibilities, Seismic Force-Resisting System, Designated Seismic System, and Seismic Force-Resisting Component: Submit written statement of responsibility for each item listed in the Statement of Special Inspections to AHJ and District prior to starting work. Statement of responsibility shall acknowledge awareness of special construction requirements and other requirements listed.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 20
--	--	--



- E. Contractor Responsibilities, Wind Force-Resisting System and Wind Force-Resisting Component: Submit written statement of responsibility for each item listed in the Statement of Special Inspections to AHJ and District prior to starting work. Statement of responsibility shall acknowledge awareness of special construction requirements and other requirements listed.
- F. Unless otherwise directed, materials not conforming to the requirements of Contract Documents shall be promptly removed from the Project site.

### **3.10 MANUFACTURERS' AND FABRICATORS' FIELD SERVICES**

- A. When specified in individual specification sections, require material suppliers, assembly fabricators, or product manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, to test, adjust, and balance equipment as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Architect 30 days in advance of required observations.
  - 1. Observer subject to approval of Architect.
  - 2. Observer subject to approval of District.
- C. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Code-Required Special Inspections 01 45 33 - 21
--	--	--

**SECTION 01 50 00**  
**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Temporary telecommunications services.
- B. Temporary sanitary facilities.
- C. Temporary Controls: fencing.
- D. Security requirements.
- E. Waste removal facilities and services.
- F. Project identification sign.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 35 53 - Security Procedures

**1.03 TEMPORARY UTILITIES**

- A. Provide and pay for all electrical power, lighting, and water required for construction purposes.
- B. Use trigger-operated nozzles for water hoses, to avoid waste of water.

**1.04 TELECOMMUNICATIONS SERVICES**

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.
- B. Telecommunications services shall include:
  - 1. Windows-based personal computer dedicated to project telecommunications, with necessary software and laser printer.
  - 2. Telephone Lines: One line, minimum; one handset per line.
  - 3. Internet Connections: Minimum of one; DSL modem or faster.
  - 4. Email: Account/address reserved for project use.

**1.05 TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
  - 1. Provide temporary toilet facilities if maximum number of personnel on project is greater than 10.
  - 2. Submit proposed location of temporary toilet(s) to Construction Manager for approval.
    - a. Place on-site portable toilets away from building air intakes and entryway.
- B. Maintain daily in clean and sanitary condition.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Temporary Facilities and Controls 01 50 00 - 1
--	--	---

#### **1.06 FENCING**

- A. Construction: Contractor's option.
- B. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

#### **1.07 SECURITY**

- A. Provide security and facilities to protect Work, existing facilities, and District's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with District's security program.
  - 1. Include construction surveillance camera system per the District.

#### **1.08 CAFETERIA AND FOOD**

- A. Construction personnel shall police their own areas. All cups, cans, paper, wrappers, and discarded food must be placed in trash receptacles at end of each break.
- B. Contractor(s) shall submit to Construction Manager proposed location of any break areas and eating areas for approval.

#### **1.09 SMOKING AND TOBACCO**

- A. Smoking and vaping is not permitted on property.
- B. No chewing tobacco or spitting of tobacco is permitted.

#### **1.10 VEHICULAR ACCESS AND PARKING**

- A. Comply with regulations relating to use of streets and sidewalks, access to emergency facilities, and access for emergency vehicles.
- B. Coordinate access and haul routes with governing authorities and District.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

#### **1.11 WASTE REMOVAL**

- A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
- B. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- C. Provide containers with lids. Remove trash from site periodically.
- D. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Temporary Facilities and Controls 01 50 00 - 2
--	--	---

### **1.12 PROJECT IDENTIFICATION**

- A. Provide project identification sign of design, construction, and location approved by District.
- B. No other signs are allowed without District permission except those required by law.

### **1.13 FIELD OFFICES**

- A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture, drawing rack, and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.
- C. Provide separate private office similarly equipped and furnished, for use of District.
- D. Locate offices a minimum distance of 30 feet from existing and new structures.

### **1.14 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, materials, prior to Final Application for Payment inspection.
- B. Remove underground installations to a minimum depth of 2 feet. Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition.
- E. Restore new permanent facilities used during construction to specified condition.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Temporary Facilities and Controls 01 50 00 - 3
--	--	---

**SECTION 01 60 00  
PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. General product requirements.
  - 1. System Completeness.
  - 2. Installation of Products.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations.
- F. Procedures for District-supplied products.
- G. Maintenance materials, including extra materials, spare parts, tools, and software.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 10 00 - Summary: Identification of District-supplied products.
- B. Section 01 25 00 - Substitution Procedures: Substitutions made during procurement and/or construction phases.
- C. Section 01 40 00 - Quality Requirements: Product quality monitoring.
- D. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions: Requirements for VOC-restricted product categories.
- E. Section 01 74 19 - Construction Waste Management and Disposal: Waste disposal requirements potentially affecting product selection, packaging and substitutions.
- F. Technical Specifications Sections.

**1.03 REFERENCE STANDARDS**

- A. 16 CFR 260.13 - Guides for the Use of Environmental Marketing Claims; Federal Trade Commission; Recycled Content.
- B. C2C (DIR) - C2C Certified Products Registry; Cradle to Cradle Products Innovation Institute.
- C. CAL (CDPH SM) - Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions From Indoor Sources Using Environmental Chambers.

**1.04 SUBMITTALS**

- A. Proposed Products List: Submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
  - 1. Submit within 15 days after date of Agreement.
  - 2. For products specified only by reference standards, list applicable reference standards.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 1
--	--	--------------------------------------

- B. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- C. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- D. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
  - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

## 1.05 QUALITY ASSURANCE

- A. CAL (CDPH SM) v1.1: California Department of Public Health (CDPH) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, v. 1.1–2010, for the emissions testing and requirements of products and materials.
- B. Recycled Content: Determine percentage of post-consumer and pre-consumer (post-industrial) content separately, using the guidelines contained in 16 CFR 260.13.
  - 1. Previously used, reused, refurbished, and salvaged products are not considered recycled.
  - 2. Wood fabricated from timber abandoned in transit to original mill is considered reused, not recycled.
  - 3. Determine percentage of recycled content of any item by dividing the weight of recycled content in the item by the total weight of materials in the item.
  - 4. Determine value of recycled content of each item separately, by multiplying the content percentage by the value of the item.
  - 5. Acceptable Evidence:
    - a. For percentage of recycled content, information from manufacturer.
    - b. For cost, Contractor's cost data.

## PART 2 PRODUCTS

### 2.01 GENERAL REQUIREMENTS

- A. Drawings and Specifications:
  - 1. If a conflict exists between the Drawings and the Specifications (Project Manual), then the Contractor is to submit a Request for Interpretation from the Architect.
    - a. As noted in the General Conditions, the more stringent requirements govern, including cost of materials and/or installation.
  - 2. If a specific product is indicated on the Drawings for use, then that product is to be used without exception in the location identified.
  - 3. If the Contractor proposes the use of another product other than the item indicated, whether or not listed in these specifications, Contractor is to submit the product using

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 2
--	--	--------------------------------------

the complete substitution process. See the the Article titled "SUBSTITUTIONS".

4. DSA (Division of the State Architect) approval is also required prior to the use or installation of any substitution, on any product or location of product (requiring a revision to the Drawings or Specifications), included in these construction documents.
  - a. Installation of a non-approved product may result in the Contractor removing and replacing the non-approved product at the Contractor's own expense.
- B. General: Items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock, and include materials, equipment, assemblies, fabrications and systems.
  1. Named Products: Items identified by manufacturer's product name, including make or model designations indicated in the manufacturer's published product data.
  2. Materials: Products that are shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed or installed to form a part of the Work.
  3. Equipment: A product with operating parts, whether motorized or manually operated, that requires connections such as wiring or piping.
- C. Specific Product Requirements: Refer to requirements of Section 01 40 00 - Quality Requirements and individual product technical Sections for specific requirements for products.
- D. Minimum Requirements: Specified requirements for products are minimum requirements. Refer to general requirements for quality of the Work specified in Section 01 40 00 - Quality Requirements and elsewhere herein.
- E. Standard Products:
  1. Where specific products are not specified, provide standard products of types and kinds that are suitable for the intended purposes and that are usually and customarily used on similar projects under similar conditions.
  2. Products shall be as selected by Contractor and subject to review and acceptance by the District and Architect.
- F. Product Completeness:
  1. Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
  2. Comply with additional requirements specified herein in Article titled "SYSTEM COMPLETENESS".
- G. Code Compliance:
  1. All products, other than commodity products prescribed by Code, are to have a current ICC Evaluation Service Research Report (ICC ESR), CABO National Evaluation Report (NER), or other testing agencies as accepted by the Division of the State Architect.
  2. Refer to additional requirements specified in Section 01 41 00 - Regulatory Requirements.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 3
--	--	--------------------------------------

## 2.02 SYSTEM COMPLETENESS

- A. The Contract Drawings and Specifications are not intended to be comprehensive directions on how to produce the Work. Rather, the Drawings and Specifications are instruments of service prepared to describe the design intent for the completed Work.
- B. It is intended that all equipment, systems and assemblies be complete and fully functional even though not fully described. Provide all products and operations necessary to achieve the design intent described in the Contract Documents.
- C. Refer to related general requirements specified in Section 01 41 00 - Regulatory Requirements regarding compliance with minimum requirements of applicable codes, ordinances and standards.
- D. Omissions and Misdescriptions: Contractor shall report to Architect immediately when elements essential to proper execution of the Work are discovered to be missing or misdescribed in the Drawings and Specifications or if the design intent is unclear.
  - 1. Should an essential element be discovered as missing or misdescribed prior to receipt of Bids, an Addendum will be issued so that all costs may be accounted for in the Contract Sum.
  - 2. Should an obvious omission or misdescription of a necessary element be discovered and reported after execution of the Agreement, Contractor shall provide the element as though fully and correctly described, and a no-cost Change Order shall be executed.
  - 3. Refer to related General Requirements specified in Section 01 30 00 - Administrative Requirements regarding construction interfacing and coordination.

## 2.03 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by Contract Documents.
- B. Unforeseen historic items encountered remain the property of the District; notify District promptly upon discovery; protect, remove, handle, and store as directed by District.
- C. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the District, or otherwise indicated as to remain the property of the District, become the property of the Contractor; remove from site.

## 2.04 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by Contract Documents.
  - 1. Provide products that fully comply with the Contract Documents, are undamaged and unused at installation.
  - 2. Comply with additional requirements specified herein in Article titled "PRODUCT OPTIONS".
- B. See Section 01 40 00 - Quality Requirements, for additional source quality control requirements.
- C. Use of products having any of the following characteristics is not permitted:
  - 1. Made outside the United States, its territories, Canada, or Mexico.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 4
--	--	--------------------------------------



2. Containing lead, cadmium, or asbestos.
- D. Where other criteria are met, Contractor shall give preference to products that:
  1. If used on interior, have lower emissions, as defined in Section 01 61 16.
  2. If wet-applied, have lower VOC content, as defined in Section 01 61 16.
  3. Are extracted, harvested, and/or manufactured closer to the location of the project.
  4. Have longer documented life span under normal use.
  5. Result in less construction waste. See Section 01 74 19
- E. Provide interchangeable components by the same manufacture for components being replaced.
  1. To the fullest extent possible, provide products of the same kind from a single source. Products required to be supplied in quantity shall be the same product and interchangeable throughout the Work.
  2. When options are specified for the selection of any of two or more products, provide product selected to be compatible with products previously selected.
- F. Product Nameplates and Instructions:
  1. Except for required Code-compliance labels and operating and safety instructions, locate nameplates on inconspicuous, accessible surfaces. Do not attach manufacturer's identifying nameplates or trademarks on surfaces exposed to view in occupied spaces or to the exterior.
  2. Provide a permanent nameplate on each item of service-connected or power-operated equipment. Nameplates shall contain identifying information and essential operating data such as the following example:
    - a. Name of manufacturer
    - b. Name of product
    - c. Model and serial number
    - d. Capacity
    - e. Operating and Power Characteristics
    - f. Labels of Tested Compliance with Codes and Standards
  3. Refer to additional requirements which may be specified in various sections, as included in this Project Manual.
  4. For each item of service-connected or power-operated equipment, provide operating and safety instructions, permanently affixed and of durable construction, with legible machine lettering. Comply with all applicable requirements of authorities having jurisdiction and listing agencies.

## 2.05 PRODUCT OPTIONS

- A. Unless the specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 5
--	--	--------------------------------------

deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words "or equal."

1. See Section 01 25 00 - Substitution Procedures.
- B. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
  1. Reference Standards:
    - a. Where Specifications require compliance with a standard, provided product shall fully comply with the standard specified.
    - b. Refer to general requirements specified in various reference standards regarding compliance with referenced standards, standard specifications, codes, practices and requirements for products.
  2. Product Description:
    - a. Where Specifications describe a product, listing characteristics required, with or without use of a brand name, provide a product that has the specified attributes and otherwise complies with specified requirements.
  3. Performance Requirements:
    - a. Where Specifications require compliance with performance requirements, provide product(s) that comply and are recommended by the manufacturer for the intended application.
    - b. Verification of manufacturer's recommendations may be by product literature or by certification of performance from manufacturer.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.
- D. Products Specified by Identification of Manufacturer and Product Name or Number:
  1. "Specified Manufacturer": Provide the specified product(s) of the specified manufacturer.
    - a. If only one manufacturer is specified, without "acceptable manufacturers" being identified, provide only the specified product(s) of the specified manufacturer.
    - b. If District standard is indicated make all efforts to provide that product.
    - c. If the phrase "or equal" or "approved equal" is stated or reference is made to the "or equal provision," products of other manufacturers may be provided if such products are equivalent to the specified product(s) of the specified manufacturer.
      - 1) Equivalence shall be demonstrated by submission of information in compliance with requirements of Section 01 25 00 - Substitution Procedures.
  2. "Acceptable Manufacturers":
    - a. Product(s) of the named manufacturers, if equivalent to the specified product(s) of the specified manufacturer, will be acceptable in accordance with the requirements of Section 01 25 00 - Substitution Procedures.
      - 1) Exception: Considerations regarding changes in Contract Time and Contract Sum will be waived if no increase in Contract Time or Contract Sum results from

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 6
--	--	--------------------------------------

use of such equivalent products.

3. Unnamed manufacturers: Product(s) of unnamed manufacturers will be acceptable when disclosed during the bidding period and only as follows:
  - a. Unless specifically stated that substitutions will not be accepted or considered, the phrase "or equal" shall be assumed to be included in the description of specified product(s).
  - b. Equivalent products of unnamed manufacturers will be accepted in accordance with the "or equal" provision specified herein, below.
  - c. If provided, products of unnamed manufacturers shall be subject to the requirements of Section 01 25 00 - Substitution Procedures.
4. Quality basis:
  - a. Specified product(s) of the specified manufacturer shall serve as the basis by which products by named acceptable manufacturers and products of unnamed manufacturers will be evaluated.
  - b. Where characteristics of the specified product are described, where performance characteristics are identified or where reference is made to industry standards, such characteristics are specified to identify the most significant attributes of the specified product(s) which will be used to evaluate products of other manufacturers.
- E. Products Specified by Combination of Methods: Where products are specified by a combination of attributes, including manufacturer's name, product brand name, product catalog or identification number, industry reference standard, or description of product characteristics, provide products conforming to all specified attributes.
- F. "Or Equal" Provision: Where the phrase "or equal" or the phrase "or approved equal" is included, equivalent product(s) of unnamed manufacturer(s) may be provided as specified above in subparagraph titled "Unnamed manufacturers" and Section 01 25 00 - Substitution Procedures with the following conditions:
  1. The requirements of Section 01 25 00 - Substitution Procedures applies to products provided under the "or equal" provision.
    - a. Exception: If the proposed product(s) are determined to be equivalent to the specified product(s) of the specified manufacturer, the requirement specified for substitutions to result in a net reduction in Contract Time or Contract Sum will be waived.
  2. Use of product(s) under the "or equal" provision shall not result in any delay in completion of the Work, including completion of portions of the Work for use by District or for work under separate contract by District.
  3. Use of product(s) under the "or equal" provision shall not result in any costs to the District, including design fees and permit and plan check fees.
  4. Use of product(s) under the "or equal" provision shall not require substantial change in the intent of the design, in the opinion of the Architect.
    - a. The intent of the design shall include functional performance and aesthetic qualities.
  5. The determination of equivalence will be made by the Architect and District, and such determination shall be final.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 7
--	--	--------------------------------------

G. Visual Matching:

1. Where Specifications require matching a sample, the decision by the Architect on whether a proposed product matches shall be final.
2. Where no product visually matches but the product complies with other requirements, comply with provisions for substitutions for selection of a matching product in another category.

H. Visual Selection of Products:

1. Where requirements include the phrase "as selected from manufacturer's standard colors, patterns and textures", or a similar phrase, selections of products will be made by indicated party or, if not indicated, by the Architect. The will select color, pattern and texture from the product line of submitted manufacturer, if all other specified provisions are met.
2. The Architect will select color, pattern and texture from the product line of submitted manufacturer, if all other specified provisions are met.

## **2.06 MAINTENANCE MATERIALS**

- A. Furnish extra materials, spare parts, tools, and software of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

## **PART 3 EXECUTION**

### **3.01 SUBSTITUTION LIMITATIONS**

- A. See Section 01 25 00 - Substitution Procedures.

### **3.02 OWNER-SUPPLIED PRODUCTS**

- A. See Section 01 10 00 - Summary for identification of District-supplied products.
- B. District's Responsibilities:
  1. Arrange for and deliver District reviewed shop drawings, product data, and samples, to Contractor.
  2. Arrange and pay for product delivery to site.
  3. On delivery, inspect products jointly with Contractor.
  4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
  5. Arrange for manufacturers' warranties, inspections, and service.
- C. Contractor's Responsibilities:
  1. Review District reviewed shop drawings, product data, and samples.
  2. Receive and unload products at site; inspect for completeness or damage jointly with District.
  3. Handle, store, install and finish products.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 8
--	--	--------------------------------------

4. Repair or replace items damaged after receipt.

### **3.03 TRANSPORTATION AND HANDLING**

- A. See also Section 01 66 00 - Product Delivery Storage and Handling.
- B. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- C. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- D. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
  1. Schedule delivery to minimize long-term storage and prevent overcrowding construction spaces.
  2. Coordinate with installation to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
- E. Transport and handle products in accordance with manufacturer's instructions.
- F. Transport products by methods to avoid product damage.
- G. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- H. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- I. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage, and to minimize handling.
- J. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.04 STORAGE AND PROTECTION**

- A. Provide protection of stored materials and products against theft, casualty, or deterioration.
- B. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication. See Section 01 74 19.
  1. Structural Loading Limitations: Handle and store products and materials so as not to exceed static and dynamic load-bearing capacities of project floor and roof areas.
- C. Inspection Provisions: Arrange storage to provide access for inspection and measurement of quantity or counting of units.
- D. Structural Considerations: Store heavy materials away from the structure in a manner that will not endanger supporting construction.
- E. Store and protect products in accordance with manufacturers' instructions.
- F. Store with seals and labels intact and legible.
- G. Arrange storage of materials and products to allow for visual inspection for the purpose of determination of quantities, amounts, and unit counts.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 9
--	--	--------------------------------------

- H. Store sensitive products in weathertight, climate-controlled enclosures in an environment favorable to product.
- I. For exterior storage of fabricated products, place on sloped supports above ground.
  - 1. Place products on raised blocks, pallets or other supports, above ground and in a manner to not create ponding or misdirection of runoff.
- J. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
  - 1. Execute a formal supplemental agreement between District and Contractor allowing off-site storage, for each occurrence.
- K. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
  - 1. Periodically inspect to ensure products are undamaged, and are maintained under required conditions.
  - 2. Remove and replace products damaged by improper storage or protection with new products at no change in Contract Sum or Contract Time.
  - 3. Weather-Resistant Storage:
    - a. Store moisture-sensitive products above ground, under cover in a weathertight enclosure or covered with an impervious sheet covering. Provide adequate ventilation to avoid condensation.
    - b. Maintain storage within temperature and humidity ranges required by manufacturer's instructions.
    - c. Store loose granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter.
- L. Comply with manufacturer's warranty conditions, if any.
- M. Do not store products directly on the ground.
- N. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- O. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- P. Prevent contact with material that may cause corrosion, discoloration, or staining.
- Q. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- R. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

### 3.05 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products, except where more stringent requirements are specified, are necessary due to Project conditions or are required by authorities having jurisdiction.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 10
--	--	---------------------------------------

- B. Anchor each product securely in place, accurately located and aligned with other Work.
- C. Clean exposed surfaces and provide protection to ensure freedom from damage and deterioration at time of Completion review. Refer to additional requirements specified in General Conditions along with Section 01 50 00 - Temporary Facilities and Controls and Section 01 70 00 - Execution and Closeout Requirements.

### **3.06 PROTECTION OF COMPLETED WORK**

- A. Provide barriers, substantial coverings and notices to protect installed Work from traffic and subsequent construction operations.
- B. Remove protective measures when no longer required and prior to Completion review of the Work.
- C. Comply with additional requirements specified in Section 01 50 00 - Temporary Construction Facilities and Controls.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Product Requirements 01 60 00 - 11
--	--	---------------------------------------

**SECTION 01 61 16**  
**VOLATILE ORGANIC COMPOUND (VOC) CONTENT RESTRICTIONS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Requirements for VOC-Content-Restricted products.
- B. Requirement for installer certification that they did not use any non-compliant products.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 30 00 - Administrative Requirements: Submittal procedures.
- B. Section 01 40 00 - Quality Requirements: Procedures for testing and certifications.
- C. Section 01 60 00 - Product Requirements: Fundamental product requirements, substitutions and product options, delivery, storage, and handling.

**1.03 DEFINITIONS**

- A. VOC-Content-Restricted Products: All products in the following product categories, whether specified or not:
  - 1. Exterior paints and coatings.
  - 2. Other products when specifically stated in the specifications.

**1.04 REFERENCE STANDARDS**

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency.
- B. ASTM D3960 - Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.
- C. CARB (SCM) - Suggested Control Measure for Architectural Coatings; California Air Resources Board.
- D. GreenSeal GS-36 - Standard for Adhesives for Commercial Use.
- E. SCAQMD 1113 - Architectural Coatings.

**1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: For each VOC-restricted product used in the project, submit evidence of compliance.
- C. Installer Certifications Regarding Prohibited Content: Require each installer of any type of product (not just the products for which VOC restrictions are specified) to certify that either 1) no adhesives, joint sealants, paints, coatings, or composite wood or agrifiber products have been used in the installation of installer's products, or 2) that such products used comply with these requirements.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Volatile Organic Compound (VOC) Content Restrictions 01 61 16 - 1
--	--	---



1. Use the form following this section for installer certifications.
- D. Verification of compliance with VOC limits as specified in the CalGreen Code Section 5.504 shall be provided at the request of the Building Inspector.
  1. Product certification and specifications.
  2. Chain of custody certifications.
  3. Product, labeled and invoiced as meeting the Composite Wood Products regulation.
  4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards
  5. Other methods approved by the building official.
- E.

## 1.06 QUALITY ASSURANCE

- A. VOC Content Test Method: 40 CFR 59, Subpart D (EPA Method 24), or ASTM D3960, unless otherwise indicated.
  1. Evidence of Compliance: Acceptable types of evidence are:
    - a. Report of laboratory testing performed in accordance with requirements.
    - b. Published product data showing compliance with requirements.
    - c. Certification by manufacturer that product complies with requirements.
- B. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.

## PART 2 PRODUCTS

### 2.01 REGULATORY REQUIREMENTS

- A. All VOC restricted products shall be compliant with local jurisdiction, South Coast Air Quality Management District, and California Green Standards Code, Rules and Regulations in effect at the time of installation. Products specified in this project shall be used as a basis of design. Updated products that are compliant with the rules in force at the time of installation shall be submitted as substitutions when they become available.
  1. If a product is found to be non-compliant with the VOC rules at the scheduled time of installation, notify the Architect a minimum of 90 days prior to installation. Contractor shall submit a suggested compliant product that is equal to the performance and cost of the specified product using the substitution procedure.

### 2.02 MATERIALS

- A. All Products: Comply with the most stringent of federal, State, and local requirements, or these specifications.
- B. VOC-Content-Restricted Products: VOC content not greater than required by the following:
  1. Aerosol Adhesives: GreenSeal GS-36.
  2. Paints and Coatings: Each color; most stringent of the following:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Volatile Organic Compound (VOC) Content Restrictions 01 61 16 - 2
--	--	---

- a. 40 CFR 59, Subpart D.
  - b. SCAQMD 1113 Rule.
  - c. CARB (SCM).
  - d. CalGreen Building Standards Section 5.504, Table 504.4.3 "VOC Content Limits for Architectural Coatings".
- C. Other Product Categories: Comply with limitations specified elsewhere.

## **PART 3 EXECUTION**

### **3.01 FIELD QUALITY CONTROL**

- A. District reserves the right to reject non-compliant products, whether installed or not, and require their removal and replacement with compliant products at no extra cost to District.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Volatile Organic Compound (VOC) Content Restrictions 01 61 16 - 3
--	--	---

**SECTION 01 61 16.01**  
**ACCESSORY MATERIAL VOC CONTENT CERTIFICATION FORM**

**FORM**

**1.01 IDENTIFICATION:**

- A. Project Name: Childcare Center Shade Structure
- B. Project No.: 1-30-65
- C. Architect: Ruhna Clark Architects

**1.02 USE OF THIS FORM:**

- A. Because installers are allowed and directed to choose accessory materials suitable for the applicable installation, there is a possibility that such accessory materials might contain VOC content in excess of that permitted, especially where such materials have not been explicitly specified.
  - 1. Each installer of work on this project is required to certify that his/their use of these particular materials complies with the contract documents and to provide documentation showing that the products used do not contain the prohibited content.
- B. Contractor is required to obtain and submit this form from each installer of work on this project.
- C. For each product category listed, check the correct paragraph.
- D. If any of these accessory materials has been used, attach to this form product data and MSDS sheet for each such product.

**1.03 VOC CONTENT RESTRICTIONS ARE SPECIFIED IN SECTION 01 61 16.**

- A. Volatile organic compounds (VOCs) are defined by the U.S. EPA, California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), along with other state and local regulations applicable to this project.

**2.01 PRODUCT CERTIFICATION**

- A. I certify that the installation work of my firm on this project:
  - 1. [HAS] [HAS NOT] required the use of any ADHESIVES.
  - 2. [HAS] [HAS NOT] required the use of any JOINT SEALANTS.
  - 3. [HAS] [HAS NOT] required the use of any PAINTS OR COATINGS.
  - 4. [HAS] [HAS NOT] required the use of any COMPOSITE WOOD or AGRIFIBER PRODUCTS.
- B. Product data and MSDS sheets are attached.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Accessory Material VOC Content Certification Form 01 61 16.01 - 1
--	--	---

**3.01 CERTIFIED BY: (INSTALLER/MANUFACTURER/SUPPLIER FIRM)**

- A. Firm Name: \_\_\_\_\_
- B. Print Name: \_\_\_\_\_
- C. Signature: \_\_\_\_\_
- D. Title: \_\_\_\_\_ (officer of company)
- E. Date: \_\_\_\_\_

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Accessory Material VOC Content Certification Form 01 61 16.01 - 2
--	--	---

**SECTION 01 70 00**  
**EXECUTION AND CLOSEOUT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Examination, preparation, and general installation procedures.
- B. Pre-installation meetings.
- C. Cutting and patching.
- D. Surveying for laying out the work.
- E. Cleaning and protection.
- F. Closeout procedures, including Contractor's Correction Punch List, except payment procedures.
- G. General requirements for maintenance service.

**1.02 RELATED REQUIREMENTS**

- A. Section 01 10 00 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 30 00 - Administrative Requirements: Submittals procedures.
- C. Section 01 40 00 - Quality Requirements: Testing and inspection procedures.
- D. Section 01 45 33 - Code-Required Special Inspections: Construction oversight procedures by Division of the State Architect regarding the execution, approval, and closeout of this building project.
- E. Section 01 71 23 - Field Engineering: Additional requirements for field engineering and surveying work.
- F. Section 01 74 19 - Construction Waste Management and Disposal: Additional procedures for trash/waste removal, recycling, salvage, and reuse.
- G. Section 01 78 00 - Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.
- H. Individual Product Specification Sections:
  - 1. Advance notification to other sections of openings required in work of those sections.
  - 2. Limitations on cutting structural members.

**1.03 REFERENCE STANDARDS**

- A. CBC Ch. 11B - California Building Code-Chapter 11B.
- B. CFC Ch. 33 - Fire Safety During Construction and Demolition.
- C. CFC Ch. 35 - California Fire Code - Chapter 35 - Welding and Other Hot Work.
- D. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 1
--	--	---

#### 1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Survey work: Submit name, address, and telephone number of Surveyor before starting survey work.
  - 1. On request, submit documentation verifying accuracy of survey work.
  - 2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in compliance with Contract Documents.
  - 3. Submit surveys and survey logs for the project record.
- C. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather exposed or moisture resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight exposed elements.
  - 5. Work of District or separate Contractor.
  - 6. Include in request:
    - a. Identification of Project.
    - b. Location and description of affected work. Include shop drawings as necessary to identify locations and communicate descriptions.
    - c. Necessity for cutting or alteration.
    - d. Description of proposed work and products to be used.
    - e. Effect on work of District or separate Contractor.
    - f. Effect on existing construction of District and, if applicable, work for Project being provided by District under separate contract.
    - g. Written permission of affected separate Contractor.
    - h. Date and time work will be executed.
  - 7. Include written evidence that those performing work under separate contract for District have been notified and acknowledge that cutting and patching work will be occurring. Include written permission for intended cutting and patching, included scheduled times.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

#### 1.05 QUALIFICATIONS

- A. For demolition work, employ a firm specializing in the type of work required.
  - 1. Minimum of 5 years of documented experience.
- B. For surveying work, employ a land surveyor registered in California and acceptable to Architect. Submit evidence of surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate. Employ only individual(s) trained and experienced in collecting and recording accurate data relevant to ongoing construction activities,

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 2
--	--	---

- C. For field engineering, employ a professional engineer of the discipline required for specific service on Project, licensed in California. Employ only individual(s) trained and experienced in establishing and maintaining horizontal and vertical control points necessary for laying out construction work on project of similar size, scope and/or complexity.
- D. For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in California.

#### 1.06 PROJECT CONDITIONS

- A. Protect site from puddling or running water.
- B. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
  - 1. Provide dust-proof enclosures to prevent entry of dust generated outdoors.
- C. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
  - 1. Minimize amount of bare soil exposed at one time.
  - 2. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
  - 3. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
  - 4. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- D. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
  - 1. At All Times: Excessively noisy tools and operations will not be tolerated inside the building at any time of day; excessively noisy includes jackhammers, pneumatic hammers, air-operated nail guns, and diesel engines.
  - 2. Outdoors: Limit conduct of especially noisy exterior work to the hours of 8 am to 5 pm.
- E. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- F. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

#### 1.07 COORDINATION

- A. See Section 01 10 00 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 3
--	--	---

- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.
- H. After District occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of District's activities.

## **PART 2 PRODUCTS**

### **2.01 PATCHING MATERIALS**

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00 - Product Requirements.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that existing conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

### **3.02 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 4
--	--	---



- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.
- D. Temporary Supports: Provide supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
- E. Weather Protection: Provide protection from elements for areas which may be exposed by uncovering Work. Maintain excavations free of water.

### 3.03 PREINSTALLATION MEETINGS

- A. When required in individual specification sections, convene a preinstallation meeting at the site prior to commencing work of the section.
- B. Require attendance of parties directly affecting, or affected by, work of the specific section.
- C. Notify Architect four days in advance of meeting date.
- D. Prepare agenda and preside at meeting:
  - 1. Review conditions of examination, preparation and installation procedures.
  - 2. Review coordination with related work.
- E. Record minutes and distribute copies within two days after meeting to participants, with electronic copies to Architect, District, participants, and those affected by decisions made.

### 3.04 LAYING OUT THE WORK

- A. Notify the District at least 48 hours before staking is to be started.
- B. Verify locations of survey control points prior to starting work.
- C. Promptly notify Architect of any discrepancies discovered.
- D. Contractor shall locate and protect survey control and reference points.
- E. Control datum for survey is that established by District provided survey.
- F. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- G. Promptly report to Architect the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- H. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.
- I. Utilize recognized engineering survey practices.
- J. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on project record documents.
- K. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:
  - 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
  - 2. Grid or axis for structures.
  - 3. Building foundation, column locations, ground floor elevations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 5
--	--	---

4. Controlling lines and levels required for mechanical and electrical trades.
- L. Periodically verify layouts by same means.
- M. Maintain a complete and accurate log of control and survey work as it progresses.
- N. On completion of foundation walls and major site improvements, prepare a certified survey illustrating dimensions, locations, angles, and elevations of construction and site work.

### 3.05 GENERAL INSTALLATION REQUIREMENTS

- A. Dimensions for Accessibility:
  1. Conventions: See CBC Ch. 11B Figure 11B-104. Dimensions that are not stated as "maximum" or "minimum" are absolute.
  2. Tolerances shall be per CBC Ch. 11B-104.1.1 "Construction and manufacturing tolerances. All dimensions are subject to conventional industry tolerances except where the requirement is stated as a range with specific minimum and maximum end points."
- B. In addition to compliance with regulatory requirements, conduct construction operations in compliance with ASTM F477 and NFPA 241, including applicable recommendations in Appendix A.
- C. When welding or doing other hot work, comply with CFC Ch. 35.
- D. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- E. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- F. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- G. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- H. Make neat transitions between different surfaces, maintaining texture and appearance.

### 3.06 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
  1. Complete the work.
  2. Fit products together to integrate with other work.
  3. Provide openings for penetration of mechanical, electrical, and other services.
  4. Match work that has been cut to adjacent work.
  5. Repair areas adjacent to cuts to required condition.
  6. Repair new work damaged by subsequent work.
  7. Remove samples of installed work for testing when requested.
  8. Remove and replace defective and non-complying work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 6
--	--	---

1. Coordinate installation or application of products for integrated Work.
  2. Uncover completed Work as necessary to install or apply products out of sequence.
  3. Remove and replace defective or non-conforming Work.
  4. Provide openings for penetration of utility services, such as plumbing, mechanical and electrical Work.
- D. After uncovering existing Work, inspect conditions affecting proper accomplishment of Work.
- E. Temporary Supports: Provide supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
- F. Beginning of cutting or patching shall be interpreted to mean that existing conditions were found by Contractor to be acceptable.
- G. Employ skilled and experienced installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- H. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
1. Use a diamond grit abrasive saw or similar cutter for smooth edges. Do not overcut corners.
- I. Restore work with new products in accordance with requirements of Contract Documents.
- J. Fit work neat and tight allowing for expansion and contraction.
- K. Patching:
1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
  2. Match color, texture, and appearance.
  3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.
- L. Finishing: Refinish surfaces to match adjacent and similar finishes as used for the Project.
1. For continuous surfaces, refinish to nearest intersection or natural break.
  2. For an assembly, refinish entire unit.

### **3.07 PROGRESS CLEANING**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and trash/rubbish from site weekly and dispose off-site; do not burn or bury.

### **3.08 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 7
--	--	---

- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Prohibit traffic from landscaped areas.
- E. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

### 3.09 PROJECT CLOSEOUT CONFERENCE

- A. Schedule and conduct a project closeout conference, at a time convenient to District and Architect, but no later than 30 days prior to the scheduled date of Completion.
  - 1. Conduct the conference to review requirements and responsibilities related to Project closeout.
  - 2. Attendees: Authorized representatives of District, Construction Manager, Architect, and relevant consultants; Contractor and project superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
  - 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
    - a. Preparation of record documents.
    - b. Commissioning.
    - c. Procedures required prior to inspection for Completion and for final inspection for acceptance.
    - d. Submittal of written warranties.
    - e. Coordination of separate contracts.
    - f. District's partial occupancy requirements.
    - g. Installation of District's furniture, fixtures, and equipment.
    - h. Responsibility for removing temporary facilities and controls.
  - 4. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, District, participants, and those affected by decisions made.

### 3.10 FINAL CLEANING

- A. Cleaning and Disposal Requirements, General: Conduct cleaning and disposal operations in compliance with all applicable codes, ordinances and regulations, including environmental protection laws, rules and practices.
- B. Execute final cleaning prior to final project assessment.
  - 1. Clean areas to be occupied by District prior to final completion before District occupancy.
- C. Use cleaning materials that are nonhazardous.
  - 1. Cleaning Agents and Materials: Use only those cleaning agents and materials which will not create hazards to health or property and which will not damage or degrade surfaces.
    - a. Use only those cleaning agents, materials and methods recommended by manufacturer of the material to be cleaned.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 8
--	--	---

- b. Use cleaning materials only on surfaces recommended by cleaning agent manufacturer.
  - c. Before use, review cleaning agents and materials with Construction Manager for suitability and compatibility. Use no cleaning agents and materials without approval as noted above.
- 2. Cleaning Procedures: All cleaning processes, agents and materials shall be subject to Architect, District and/or Construction Manager review and approval. Processes and degree of cleanliness shall be as directed by Architect, District and/or Construction Manager.
- D. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- E. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- F. Clean filters of operating equipment.
- G. Clean debris from drainage systems.
- H. Clean site; sweep paved areas, rake clean landscaped surfaces.
- I. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

### 3.11 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
  - 1. Provide copies to Architect and District.
- B. Accompany District, Architect, and Construction Manager on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's comprehensive list of items to be completed or corrected.
  - 1. As authorized by the District; Architect and Architect's and District's consultants, as appropriate, will attend a meeting at the Project site to review Contract closeout procedures and to review the list of items to be completed and corrected (punch list) to make the Work ready for acceptance by the District.
  - 2. This meeting shall be scheduled not earlier than 14 days prior to the date anticipated for the Final Inspection review.
- C. Notify Architect when work is considered ready for Architect's Final inspection.
- D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's Final inspection.
  - 1. Final Application for Payment: In the Application for Payment that coincides with the date Final Inspection/Completion is claimed, show 100 percent completion for the portion of the Work claimed substantially complete.
  - 2. Warranties, Bonds and Certificates: Submit specific warranties, guarantees, workmanship bonds, maintenance agreements, final certifications and similar documents.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 9
--	--	---

3. Locks and Keys: Change temporary lock cylinders over to permanent keying and transmit keys to the District, unless otherwise directed or specified.
  4. Tests and Instructions: Complete start-up testing of systems, and instruction of the District's personnel. Remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
- E. Clearing and Cleaning: Prior to the Final Inspection review, Contractor shall conduct a thorough cleaning and clearing of the Project area, including removal of construction facilities and temporary controls.
- F. Conduct Final Inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
1. Correction (Punch) List: Contractor shall prepare and distribute at the preliminary Contract closeout review meeting, a typewritten, comprehensive list of items to be completed and corrected (punch list) to make the Work ready for acceptance by the District.
    - a. The punch list shall include all items to be completed or corrected prior to the Contractor's application for final payment.
    - b. The punch list shall identify items by location (room number or name) and consecutive number. For example, 307-5 would identify item 5 in Room 307, Roof-4 would identify item 4 on Roof.
    - c. Contractor shall prepare separate lists according to categories used for Drawings. For example, provide lists for Architectural, Structural, Plumbing, Mechanical, Electrical, Fire Protection, Civil, and Landscape.
    - d. Architect, Architect's consultants and District's consultants, if in attendance, will conduct a brief walk-through of Project with the Contractor to review scope and adequacy of the punch list.
    - e. Verbal comments will be made to the Contractor by the DSA, the Architect and the Architect's and District's consultants, if in attendance, during the walk-through. These comments will indicate generally the additions and corrections to be made to the punch list. Such comments shall not be considered to be comprehensive; Contractor shall use the comments as guidance in preparing the punch list for the Final Inspection review.
  2. Final Inspection Meeting: On a date mutually agreed by the District, Architect, and Contractor, a meeting shall be conducted at the Project site to determine whether the Work is satisfactory and complete for filing a Notice of Completion.
    - a. Contractor shall provide three working days notice to Architect for requested date of Final Inspection meeting.
    - b. The Construction Manager, the Architect with Architect's / District's consultants, as authorized by the District, will attend the Final Inspection meeting.
    - c. In addition to conducting a walk-through of the facility and reviewing the punch list, the purpose of the meeting shall include submission of warranties, guarantees and bonds to the District, submission of operation and maintenance data (manuals),

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 10
--	--	--

provision of specified extra materials to the District, and submission of other Contract closeout documents and materials as required and if not already submitted.

- d. The Construction Manager, Architect and Architect's consultants, as appropriate, will conduct a walk-through of the facility with the Contractor and review the punch list.
  - e. Contractor shall correct the punch list and record additional items as may identified during the walk-through, including notations of corrective actions to be taken.
  - f. Contractor shall retype the punch list and distribute it within three working days to those attending the meeting.
  - g. If additional site visits by the Construction Manager, the Architect and the Architect's and District's consultants are required to review completion and correction of the Work, the costs of additional visits shall be reimbursed to the District by the Contractor by deducting such costs from the Final Payment.
- G. Correct items of work listed in Final Correction Punch List and comply with requirements for access to District-occupied areas.
- H. Notify Architect when work is considered finally complete and ready for Architect's Final Inspection.
- 1. Architect's Certification of Completion:
    - a. When Architect determines that list of items to be completed and corrected (Punch List) is sufficiently complete for District to occupy Project for the use to which it is intended.
- I. Complete items of work determined by Architect listed in executed Certificate of Completion.

### **3.12 FINAL PAYMENT**

- A. After completion of all items listed for completion and correction, after submission of all documents and products and after final cleaning, submit final Application for Payment, identifying total adjusted Contract Sum, previous payments and sum remaining due.
- B. Payment will not be made until the following are accomplished:
- 1. All Project Record Documents have been transferred and accepted by District.
  - 2. All extra materials and maintenance stock have been transferred and received by District.
  - 3. All warranty documents and operation and maintenance data have been received and accepted by District.
  - 4. All liens have been released or bonded by Contractor.
  - 5. Contractor's surety has consented to Final Payment.
  - 6. All documentation required by DSA has been completed.

### **3.13 MAINTENANCE**

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Project Completion or the length of the specified warranty, whichever is longer.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 11
--	--	--

- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the District.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Execution and Closeout Requirements 01 70 00 - 12
--	--	--



**SECTION 01 71 23  
FIELD ENGINEERING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Field engineering services by Contractor.

**1.02 DESCRIPTION OF SERVICES**

- A. Specific services listed in this section are in addition to, and do not supersede, general Execution and Closeout Requirements.
- B. Sole responsibility for establishing all locations, dimensions and levels of items of work.
- C. Sole responsibility for provision of all materials required to establish and maintain benchmarks and control points, including batter boards, grade stakes, structure, and pipeline elevation stakes, and other items.
- D. Having a skilled instrument person(s) available on short notice when necessary for laying out the work.
- E. Keeping a transit, theodolite, or TST (total station theodolite with electronic distance measurement device); leveling instrument; and related implements such as survey rods and other measurement devices, at the project site at all times.
- F. Provision of facilities and assistance necessary for Architect to check lines and grade points placed by Contractor.
  - 1. Performance of excavation or embankment work until after all cross-sectioning necessary for determining payment quantities for Unit Price work have been completed and accepted by Architect.
- G. Preparation and maintenance of daily reports of activity on the work. Submission of reports containing key progress indicators and job conditions to Architect.
  - 1. Number of employees at the Site.
  - 2. Number employees at the Site for each of Contractor's subcontractors.
  - 3. Breakdown of employees by trades.
  - 4. Major equipment and materials installed as part of the work.
  - 5. Major construction equipment utilized.
  - 6. Location of areas in which construction was performed.
  - 7. Materials and equipment received.
  - 8. Work performed, including field quality control measures and testing.
  - 9. Weather conditions.
  - 10. Safety.
  - 11. Delays encountered, amount of delay incurred, and the reasons for the delay.
  - 12. Instructions received from Architect or District, if any.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Field Engineering 01 71 23 - 1
--	--	-----------------------------------

- H. Preparation and maintenance of professional-quality, accurate, well organized, legible notes of all measurements and calculations made while surveying and laying out the work.
- I. Prior to backfilling operations, surveying - locating, and recording on a copy of Contract Documents - an accurate representation of buried work and Underground Facilities encountered.
- J. Setting up and executing time-lapse photography of construction activities.

### **1.03 REFERENCE STANDARDS**

- A. State Plane Coordinate System for California.

### **1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by all affected installers.

### **1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Submit in addition to items required in Section 01 70 00 - Execution and Closeout Requirements.
- C. Informational Submittals: Submit the following:
  - 1. Field Engineering: Submit daily reports, with content as indicated in this section.
    - a. When requested by Architect, submit for Record documentation verifying accuracy of field engineering including, but not limited to, Contractor's survey notes and field notes.
  - 2. Final property survey.

### **1.06 QUALITY ASSURANCE**

- A. Field Engineer's Qualifications: As established in Section 01 70 00 - Execution and Closeout Requirements.
- B. Use adequate number of skilled and thoroughly-trained workers to perform the work of this section in a timely and comprehensive manner.
- C. Minimum accuracy for required work is as follows:
  - 1. Grade: Horizontal Tolerance: Plus or minus 0.5 feet, Vertical Tolerance: Plus or minus 0.05 feet.
  - 2. Structures: Horizontal Tolerance: Plus or minus 0.5 feet (location), Vertical Tolerance: Plus or minus 0.05 feet.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Field Engineering 01 71 23 - 2
--	--	-----------------------------------

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. Notify District's Representative and Architect of any discrepancies immediately in writing before proceeding to lay out the work. Locate and protect existing benchmarks and base line. Preserve permanent reference points during construction.
- B. Existing Utilities and Equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify existing conditions.

### **3.02 FIELD ENGINEERING**

- A. Maintain field office files, drawings, specifications, and record documents.
- B. Coordinate field engineering services with Contractor's subcontractors, installers, and suppliers as appropriate.
- C. Prepare layout and coordination drawings for construction operations.
- D. Check and coordinate the work for conflicts and interferences, and immediately advise Architect and District of all discrepancies of which Contractor is aware.
- E. Cooperate as required with Architect and District in observing the work and performing field inspections.
- F. Review and coordinate work on a regular basis with shop drawings and Contractor's other submittals.
- G. In general, match existing adjacent grades and maintain existing flow lines.
- H. Check the location, line and grade of every major element as the work progresses. Notify the Architect when deviations from required lines or grades exceed allowable tolerances. Include in such notifications a thorough explanation of the problem, and a proposed plan and schedule for remedying the deviation. Do not proceed with remedial work without District's concurrence of the remediation plan.
- I. Check all formwork, reinforcing, inserts, structural steel, bolts, sleeves, piping, other materials and equipment for compliance with shop drawings and Contract Documents requirements.
- J. Check all bracing and shoring for structural integrity and compliance with designs prepared by the Contractor.

### **3.03 CONSTRUCTION SURVEYING**

- A. General: Perform surveying as applicable to specific items necessary for proper execution of work.
  - 1. Alignment Staking: Provide alignment stakes at 50 foot intervals on tangent, and at 25 foot intervals on curves.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Field Engineering 01 71 23 - 3
--	--	-----------------------------------

2. Slope Staking: Provide slope staking at 50 foot intervals on tangent, and at 25 foot intervals on curves. Re-stake at every ten-foot difference in elevation.
  3. Structure: Stake out structures, including elevations, and check prior to and during construction.
- B. Record Log: Maintain a log of layout control work. Record any deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used.
- C. Use by the Architect: The Architect may at any time use line and grade points and markers established by the Contractor. The Contractor's surveys are a part of the work and may be checked by the Architect at any time.
- D. Accuracy:
1. Establish Contractor's temporary survey references points for Contractor's use to at least second-order accuracy (e.g., 1:10000). Set construction staking used as a guide for the work to at least third-order accuracy (e.g., 1:5000). Provide the absolute margin for error specified below on the basis established by such orders.
    - a. Horizontal accuracy of easement staking: Plus or minus 0.1 feet.
    - b. Accuracy of other staking shall be plus or minus 0.04 feet horizontally and plus or minus 0.02 feet vertically.
    - c. Include an error analysis sufficient to demonstrate required accuracy in survey calculations.
  2. District reserves the right to check the Contractor's survey, measurements, and calculations. The requirement for accuracy will not be waived, whether this right is exercised or not.

### 3.04 REPORTS

- A. Submit two copies of Contractor's daily reports at Architect's field office (or electronically) by 9:00 AM the next working day after the day covered in the associated report. Daily report shall be signed by responsible member of Contractor's staff, such as project manager or superintendent, or foreman designated by Contractor as having authority to sign daily reports.

### 3.05 RECORDS

- A. Maintain at the Site a complete and accurate log of control and survey work as it progresses.
1. Organize and record survey data in accordance with recognized professional surveying standards, Laws and Regulations, and prevailing standards of practice in California. Record Contractor's surveyor's original field notes, computations, and other surveying data in Contractor-furnished hard-bound field books. Contractor is solely responsible for completeness and accuracy of survey work, and completeness and accuracy of survey records, including field books. Survey records, (including field books) may be rejected by District due to failure to organize and maintain survey records in a manner that allows reasonable and independent verification of calculations, and/or allows identification of elevations, dimensions, and grades of the work.
  2. Illegible notes or data, and erasures on any page of field books, are unacceptable. Do not submit copied notes or data. Corrections by ruling or lining out errors will be

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Field Engineering 01 71 23 - 4
--	--	-----------------------------------

unacceptable unless initialed by the surveyor. Violation of these requirements may require re-surveying the data questioned by Architect.

- B. Submit three copies of final property survey to District. Include on the survey a certification, signed by the surveyor, that principal metes, bounds, lines, and levels of the Project are accurately positioned as shown on the survey. Include the following information:
  - 1. Structure locations from property lines, and distances to adjacent buildings.

### **3.06 CLOSEOUT ACTIVITIES**

- A. See Section 01 78 00 - Closeout Submittals, for closeout submittals.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Field Engineering 01 71 23 - 5
--	--	-----------------------------------

**SECTION 01 74 19**  
**CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL**

**PART 1 GENERAL**

**1.01 WASTE MANAGEMENT REQUIREMENTS**

- A. Comply with the requirements Section 5.408 of the California Green Building Standards Code.
  - 1. Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 504.8.1.1, 5.408.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.
- B. District requires that this project generate the least amount of trash and waste possible.
- C. Employ processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors.
- D. Minimize trash/waste disposal in landfills; reuse, salvage, or recycle as much waste as economically feasible.
- E. Required Recycling, Salvage, and Reuse: The following may not be disposed of in landfills or by incineration:
  - 1. Aluminum and plastic beverage containers.
  - 2. Corrugated cardboard.
  - 3. Wood pallets.
  - 4. Clean dimensional wood.
  - 5. Concrete: May be crushed and used as riprap, aggregate, sub-base material, or fill.
  - 6. Bricks: May be used on project if whole, or crushed and used as landscape cover, sub-base material, or fill.
  - 7. Concrete masonry units: May be used on project if whole, or crushed and used as sub-base material or fill.
  - 8. Asphalt paving: May be recycled into paving for project.
  - 9. Metals, including packaging banding, metal studs, sheet metal, structural steel, piping, reinforcing bars, door frames, and other items made of steel, iron, galvanized steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
  - 10. Glass.
  - 11. Gypsum drywall and plaster.
  - 12. Carpet, carpet cushion, carpet tile, and carpet remnants, both new and removed: DuPont (<http://flooring.dupont.com>) and Interface ([www.interfaceinc.com](http://www.interfaceinc.com)) conduct reclamation programs.
  - 13. Roofing.
  - 14. Paint.
  - 15. Plastic sheeting.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 1
--	--	---

16. Rigid foam insulation.
17. Windows, doors, and door hardware.
18. Plumbing fixtures.
19. Mechanical and electrical equipment.
20. Fluorescent lamps (light bulbs).
21. Acoustical ceiling tile and panels.
22. Materials which could be hazardous and subject to special disposal regulations include but are not limited to the following: CalGreen Section 5.408.2
  - a. Lead-Based Paint
  - b. Asbestos: Found in older pipe insulation, asphalt floor tiles, linoleum, insulation, etc.
  - c. Polychlorinated Biphenyls (PCBs):
    - 1) Found in electrical oil filled equipment manufactured prior to 1978 such as transformers, switches and fluorescent lamp ballasts.
    - 2) Also found in adhesive, sealant, caulk, glazing putty, roofing material, pesticide vehicle, ink, paper, fabric dye, gaskets, and hydraulic fluid.
  - d. HVAC Refrigerants: Containing Fluorinated and Chlorinated compounds.
  - e. Drinking Fountain Refrigerants: Containing Fluorinated and Chlorinated compounds.
  - f. Fluorescent Light Tubes: Contain mercury.
  - g. EXIT signs and Smoke Detectors: May contain unregulated, radioactive tritium. · Required to be returned to manufacturer.
  - h. Contaminated Soils.
  - i. Pressure Treated Lumber.
- F. Contractor shall submit periodic Waste Disposal Reports; all landfill disposal, recycling, salvage, and reuse must be reported regardless of to whom the cost or savings accrues; use the same units of measure on all reports.
  1. Contractor's quantitative reports for construction waste materials as a condition of approval of progress payments.
- G. Contractor shall develop and follow a Waste Management Plan designed to implement these requirements. CalGreen Section 5.408.1.1.
  - 1.
- H. The following sources may be useful in developing the Waste Management Plan:
  1. California Recycling Department, at [www.dgs.ca.gov/BSC/CALGreen](http://www.dgs.ca.gov/BSC/CALGreen).
  2. General information contacts regarding construction and demolition waste:
    - a. Directory of Wood-Framed Building Deconstruction and Reused Building Materials Companies: [www.fpl.fs.fed.us/documnts/fplgtr/fpl\\_gtr150.pdf](http://www.fpl.fs.fed.us/documnts/fplgtr/fpl_gtr150.pdf).
    - b. Additional resources to be developed by Contractor with assistance from District and **Contractor, as requested.**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 2
--	--	---

3. Recycling Haulers and Markets: The source list below contains local haulers and markets for recyclable materials. This list is provided for information only and is not necessarily comprehensive; other haulers and markets are acceptable.
  - a. CAL-MAX: [www.calrecycle.ca.gov/calmax/](http://www.calrecycle.ca.gov/calmax/).
    - 1) A free service designed to help businesses find markets for non-hazardous materials they have traditionally discarded.
  - b. General Recycling/Reuse Centers: For information on qualified local solid waste haulers contact the California Department of Resources Recycling and Recovery - CalRecycle. The website lists wastes recycling facilities in counties throughout the State of California.
    - 1) [www.calrecycle.ca.gov](http://www.calrecycle.ca.gov).
4. Recycling Economics Information: The above lists contain information that may be useful in estimating the costs or savings or recycling options.
- I. Methods of trash/waste disposal that are not acceptable are:
  1. Burning on the project site.
  2. Burying on the project site.
  3. Dumping or burying on other property, public or private.
  4. Other illegal dumping or burying.
  5. Incineration, either on- or off-site.
- J. Regulatory Requirements: Contractor is responsible for knowing and complying with regulatory requirements, including but not limited to Federal, state and local requirements, pertaining to legal disposal of all construction and demolition waste materials.

## 1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: List of items to be salvaged from the existing building for relocation in project or for District.
- B. Section 01 30 00 - Administrative Requirements: Additional requirements for project meetings, reports, submittal procedures, and project documentation.
- C. Section 01 50 00 - Temporary Facilities and Controls: Additional requirements related to trash/waste collection and removal facilities and services.
- D. Section 01 60 00 - Product Requirements: Waste prevention requirements related to delivery, storage, and handling.
- E. Section 01 70 00 - Execution and Closeout Requirements: Trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

## 1.03 DEFINITIONS

- A. Clean: Untreated and unpainted; not contaminated with oils, solvents, caulk, or the like.
- B. Construction and Demolition Waste: Solid wastes typically including building materials, packaging, trash, debris, and rubble resulting from construction, remodeling, repair and demolition operations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 3
--	--	--



1. Debris that is not hazardous as defined in CalGreen Section 5.408.2 and California Code of Regulations, Title 22, Section 66261.3 et seq.
  2. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel.
  3. The debris may be commingled with rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.
- 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. Diversion: Avoidance of demolition and construction waste sent to landfill or incineration. Diversion does not include using materials for landfill, alternate daily cover on landfills, or materials used as fuel in waste-to-energy processes.
- E. Enforcement Agency (EA). Enforcement agency as defined in CA Public Resources Code 40130.
- F. Hazardous: Exhibiting the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity or reactivity.
- G. Landfill, Inert waste or Inert Disposal Facility:
1. A disposal facility that accepts only inert waste such as soil and rock, fully cured asphalt paving, uncontaminated concrete (including fiberglass or steel reinforcing rods embedded in the concrete), brick, glass, and ceramics, for land disposal.
- H. Landfill, Class III:
1. A landfill that accepts non-hazardous resources such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations.
  2. A Class III landfill must have a solid waste facilities permit from the California Integrated Waste Management Board (CIWMB) and is regulated by the Enforcement Agency (EA).
- I. Mixed Debris: Loads that include commingled recyclable and non-recyclable materials generated at the construction site.
- J. Mixed Debris Recycling Facility: A processing facility that accepts loads of commingled construction and demolition debris for the purpose of recovering re-usable and recyclable materials and disposing the non-recyclable residual materials.
- K. Nonhazardous: Exhibiting none of the characteristics of hazardous substances, i.e., ignitibility, corrosivity, toxicity, or reactivity.
- L. Nontoxic: Neither immediately poisonous to humans nor poisonous after a long period of exposure.
- M. Recyclable: The ability of a product or material to be recovered at the end of its life cycle and remanufactured into a new product for reuse by others.
- N. Recycle: To remove a waste material from the project site to another site for remanufacture into a new product for reuse by others.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 4
--	--	---

- O. Recycling: The process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for the purpose of using the altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- P. Recycling Center: A facility that receives only C&D material that has been separated for reuse prior to receipt, in which the residual (disposed) amount of waste in the material is less than 10% of the amount separated for reuse by weight.
- Q. Return: To give back reusable items or unused products to vendors for credit.
- R. Reuse: To reuse a construction waste material in some manner on the project site.
- S. Salvage: To remove a waste material from the project site to another site for resale or reuse by others.
- T. Sediment: Soil and other debris that has been eroded and transported by storm or well production run-off water.
- U. Separated for Reuse:
  - 1. Materials, including commingled recyclables.
  - 2. Separated or kept separate from the solid waste stream for the purpose of:
    - a. Additional sorting or processing those materials for reuse or recycling.
      - 1) In order to return them to the economic mainstream in the form of raw material for new, reused, or reconstituted products.
    - b. Products shall meet the quality standards necessary to be used in the marketplace.
    - c. Includes materials that have been "source separated".
- V. Solid Waste:
  - 1. All putrescible and nonputrescible solid, semisolid, and liquid wastes, including:
    - a. Garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes.
    - b. Abandoned vehicles and parts thereof.
    - c. Discarded home and industrial appliances.
    - d. Dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste.
    - e. Manure, vegetable or animal solid and semisolid wastes.
    - f. Other discarded solid and semisolid wastes.
  - 2. "Solid waste" does not include hazardous waste, radioactive waste, or medical waste as defined or regulated by State law.
- W. Source Separation: The act of keeping different types of waste materials separate beginning from the first time they become waste.
  - 1. Materials, including commingled recyclables, that have been separated or kept separate from the solid waste stream at the point of generation, for the purpose of additional sorting or processing of those materials for reuse or recycling in order to return them to the economic mainstream in the form of raw materials for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 5
--	--	---

- X. Toxic: Poisonous to humans either immediately or after a long period of exposure.
- Y. Trash: Any product or material unable to be reused, returned, recycled, or salvaged.
- Z. Waste: Extra material or material that has reached the end of its useful life in its intended use. Waste includes salvageable, returnable, recyclable, and reusable material.
- AA. Waste Hauler: A company that possesses a valid permit from the local waste management authority to collect and transport solid wastes from individuals or businesses for the purpose of recycling or disposal in the locality.

#### 1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Submit Waste Management Plan within 30 calendar days after receipt of Notice to Proceed, or prior to any trash or waste removal, whichever occurs sooner; submit projection of all trash and waste that will require disposal and alternatives to landfilling.
  - 1. Submit four copies of CWMP for review.
    - a. Contractor's Construction Waste and Recycling Plan must be approved by the Architect and Construction Manager prior to the start of Work.
  - 2. Approval of the Contractor's CWMP shall not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
- C. Waste Management Plan: Include the following information:
  - 1. Analysis of the trash and waste projected to be generated during the entire project construction cycle, including types and quantities.
  - 2. Landfill Options: The name, address, and telephone number of the landfill(s) where trash/waste will be disposed of, the applicable landfill tipping fee(s), and the projected cost of disposing of all project trash/waste in the landfill(s).
  - 3. Landfill Alternatives: List all waste materials that will be diverted from landfills by reuse, salvage, or recycling.
    - a. List each material proposed to be salvaged, reused, or recycled.
    - b. List the local market for each material.
    - c. State the estimated net cost, versus landfill disposal.
  - 4. Meetings: Describe regular meetings to be held to address waste prevention, reduction, recycling, salvage, reuse, and disposal.
  - 5. Materials Handling Procedures: Describe the means by which materials to be diverted from landfills will be protected from contamination and prepared for acceptance by designated facilities; include separation procedures for recyclables, storage, and packaging.
  - 6. Transportation: Identify the destination and means of transportation of materials to be recycled; i.e. whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler.
  - 7. Recycling Incentives: Describe procedures required to obtain credits, rebates, or similar incentives.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 6
--	--	---

- D. Waste Disposal Reports: Submit at specified intervals, with details of quantities of trash and waste, means of disposal or reuse, and costs; show both totals to date and since last report.
1. Submit updated Report with each Application for Progress Payment; failure to submit Report will delay payment.
    - a. Inert materials shall achieve a construction waste diversion rate of at least 95 percent.
      - 1) These materials include, but are not limited to, concrete, asphalt and rock.
      - 2) Earthwork is not included.
      - 3) Excavated soil shall not be included in any of the calculations used to ensure compliance with this specification section.
    - b. The overall diversion rate must be based on weight.
    - c. The diversion rate of individual materials can be measured in either weight or volume, but the rate shall be converted into the units selected for calculating the overall diversion rate.
      - 1) All individual material diversions must be converted to a consistent set of units when calculating the overall diversion rate for the all reports and submittals required for the Work.
    - d. Base conversion rate numbers on standard conversion rate data for construction projects provided by the California Integrated Waste Management Board (CIWMB). This data is available at the following internet location, [www.calrecycle.ca.gov/LGCentral/Library/Guidance](http://www.calrecycle.ca.gov/LGCentral/Library/Guidance).
  2. Submit Report on a form acceptable to District.
  3. Landfill Disposal: Include the following information:
    - a. Identification of material.
    - b. Amount, in tons or cubic yards, of trash/waste material from the project disposed of in landfills.
    - c. State the identity of landfills, total amount of tipping fees paid to landfill, and total disposal cost.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.
  4. Recycled and Salvaged Materials: Include the following information for each:
    - a. Identification of material, including those retrieved by installer for use on other projects.
    - b. Amount, in tons or cubic yards, date removed from the project site, and receiving party.
    - c. Transportation cost, amount paid or received for the material, and the net total cost or savings of salvage or recycling each material.
    - d. Include manifests, weight tickets, receipts, and invoices as evidence of quantity and cost.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 7
--	--	---

- e. Certification by receiving party that materials will not be disposed of in landfills or by incineration.
- 5. Material Reused on Project: Include the following information for each:
  - a. Identification of material and how it was used in the project.
  - b. Amount, in tons or cubic yards.
  - c. Include weight tickets as evidence of quantity.
- 6. Other Disposal Methods: Include information similar to that described above, as appropriate to disposal method.

## **PART 2 PRODUCTS**

### **2.01 PRODUCT SUBSTITUTIONS**

- A. See Section 01 60 00 - Product Requirements for substitution submission procedures.
- B. For each proposed product substitution, submit the following information in addition to requirements specified in Section 01 60 00:
  - 1. Relative amount of waste produced, compared to specified product.
  - 2. Cost savings on waste disposal, compared to specified product, to be deducted from the Contract Sum.
  - 3. Proposed disposal method for waste product.
  - 4. Markets for recycled waste product.

## **PART 3 EXECUTION**

### **3.01 WASTE MANAGEMENT PROCEDURES**

- A. See Section 01 30 00 for additional requirements for project meetings, reports, submittal procedures, and project documentation.
- B. See Section 01 50 00 for additional requirements related to trash/waste collection and removal facilities and services.
- C. See Section 01 60 00 for waste prevention requirements related to delivery, storage, and handling.
- D. See Section 01 70 00 for trash/waste prevention procedures related to demolition, cutting and patching, installation, protection, and cleaning.

### **3.02 WASTE MANAGEMENT PLAN IMPLEMENTATION**

- A. Manager: Designate an on-site person or persons responsible for instructing workers and overseeing and documenting results of the Waste Management Plan.
- B. Communication: Distribute copies of the Waste Management Plan to job site foreman, each subcontractor, District, and Architect.
- C. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 8
--	--	---

- D. Meetings: Discuss trash/waste management goals and issues at project meetings.
  - 1. Prebid meeting.
  - 2. Preconstruction meeting.
  - 3. Regular job-site meetings.
- E. Facilities: Provide specific facilities for separation and storage of materials for recycling, salvage, reuse, return, and trash disposal, for use by all contractors and installers.
  - 1. As a minimum, provide:
    - a. Separate area for storage of materials to be reused on-site, such as wood cut-offs for blocking.
    - b. Separate dumpsters for each category of recyclable.
    - c. Recycling bins at worker lunch area.
  - 2. Provide containers as required.
  - 3. Provide temporary enclosures around piles of separated materials to be recycled or salvaged.
  - 4. Provide materials for barriers and enclosures that are nonhazardous, recyclable, or reusable to the maximum extent possible; reuse project construction waste materials if possible.
  - 5. Locate enclosures out of the way of construction traffic.
  - 6. Provide adequate space for pick-up and delivery and convenience to subcontractors.
  - 7. If an enclosed area is not provided, clearly lay out and label a specific area on-site.
  - 8. Keep recycling and trash/waste bin areas neat and clean and clearly marked in order to avoid contamination of materials.
- F. Hazardous Wastes: Separate, store, and dispose of hazardous wastes according to applicable regulations.
- G. Recycling: Separate, store, protect, and handle at the site identified recyclable waste products in order to prevent contamination of materials and to maximize recyclability of identified materials. Arrange for timely pickups from the site or deliveries to recycling facility in order to prevent contamination of recyclable materials.
- H. Reuse of Materials On-Site: Set aside, sort, and protect separated products in preparation for reuse.
- I. Salvage: Set aside, sort, and protect products to be salvaged for reuse off-site.

### 3.03 DISPOSAL OPERATIONS AND WASTE HAULING

- A. Remove waste materials from Project Site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
  - 1. Except for items or materials to be salvaged, recycled, or otherwise reused.
  - 2. Except as otherwise specified, do not allow waste materials that are to be disposed of to accumulate on site.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 9
--	--	---

3. Use a permitted waste hauler or Contractor's trucking services and personnel. To confirm valid permitted status of waste haulers, contact the local solid waste authority.
4. Become familiar with the conditions for acceptance of new construction, excavation and demolition materials at recycling facilities, prior to delivering materials.
5. Deliver to facilities that can legally accept new construction, excavation and demolition materials for purpose of re-use, recycling, composting, or disposal.
6. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
7. Do not burn or bury waste materials on or off site. Appropriate on-site topical application of ground gypsum or wood, or use of site paving as granulated fill is considered reuse, not waste.

#### **3.04 PLAN AND REPORT FORMS**

- A. See suggested forms on the following pages.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Construction Waste Management and Disposal 01 74 19 - 10
--	--	--

## CONTRACTOR'S CONSTRUCTION WASTE AND RECYCLING PLAN

(Submit After Award of Contract and Prior to Start of Work)

Project Title:						
Contract or Work Order No.:						
Contractor's Name:						
Street Address:						
City:				State:		Zip:
Phone: (    )				Fax: (    )		
E-Mail Address:						
Prepared by: (Print Name)						
Date Submitted:						
Project Period:		From:			TO:	
Reuse, Recycling or Disposal Processes To Be Used						
Describe the types of recycling processes or disposal activities that will be used for material generated in the project. Indicate the type of process or activity by number, types of materials, and estimated quantities that will be recycled or disposed in the sections below:						
01 - Reuse of building materials or salvage items on site (i.e. crushed base or red clay brick)						
02 - Salvaging building materials or salvage items at an offsite salvage or re-use center (i.e. lighting, fixtures)						
03 - Recycling source separated materials on site (i.e. crushing asphalt/concrete for reuse or grinding for mulch)						
04 - Recycling source separated materials at an offsite recycling center (i.e. scrap metal or green materials)						
05 - Recycling commingled loads of C&D materials at an offsite mixed debris recycling center or transfer station						
06 - Recycling material as Alternative Daily Cover at landfills						
07 - Delivery of soils or mixed inerts to an inert landfill for disposal (inert fill).						
08 - Disposal at a landfill or transfer station.						
09 - Other (please describe) _____						
Types of Material To Be Generated						
Use these codes to indicate the types of material that will be generated on the project						
A = Asphalt		C = Concrete		M = Metals		I = Mixed Inert    G = Green Materials
D = Drywall		P/C=Paper/Cardboard		W/C = Wire/Cable		S= Soils (Non Hazardous)
M/C = Miscellaneous Construction Debris		R = Reuse/Salvage		W = Wood		O = Other (describe)
Facilities Used: Provide Name of Facility and Location (City)						
Total Truck Loads: Provide Number of Trucks Hauled from Site During Reporting Period						
Total Quantities: If scales are available at sites, report in tons. If not, quantify by cubic yards. For salvage/reuse items, quantify by estimated weight (or units).						
SECTION I - RE-USED/RECYCLED MATERIALS						
Include all recycling activities for source separated or mixed material recycling centers where recycling will occur.						
Type of Material	Type of Activity	Facility to be Used/Location	Total Truck Loads	Total Quantities		
				Tons	Cubic YD	Other Wt.
(ex.) M	04	ABC Metals, Los Angeles	24	355		
a. Total Diversion						



# CONTRACTOR'S CONSTRUCTION WASTE AND RECYCLING PLAN

Continued

SECTION II - DISPOSED MATERIALS						
Include all disposal activities for landfills, transfer stations, or inert landfills where no recycling will occur.						
Type of Material	Type of Activity	Facility to be Used/Location	Total Truck Loads	Total Quantities		
				Tons	Cubic YD	Other Wt.
(ex.) D	08	DEF Landfill, Los Angeles	2	35		
b. Total Disposal				0	0	0

SECTION III - TOTAL MATERIALS GENERATED			
This section calculates the total materials to be generated during the project period (Reuse/Recycle + Disposal = Generation)			
	Tons	Cubic YD	Other Wt.
a. Total Reused/Recycled	0	0	0
b. Total Disposed	0	0	0
c. Total Generated	0	0	0

SECTION IV - CONTRACTOR'S LANDFILL DIVERSION RATE CALCULATION			
Add totals from Section I + Section II			
	Tons	Cubic YD	Other Wt.
a. Materials Re-Used and Recycled	0		
b. Materials Disposed	0		
c. Total Materials Generated (a. + b. = c.)	0	0	0
d. Landfill Diversion Rate (Tonnage Only)*			

\* Use tons only to calculate recycling percentages: Tons Reused/Recycled/Tons Generated = % Recycled

Contractor's Comments (Provide any additional information pertinent to planned reuse, recycling, or disposal activities):

## Notes:

1. Suggested Conversion Factors: From Cubic Yards to Tons  
(Use when scales are not available)

- a. Asphalt: .61 (ex. 1000 CY Asphalt = 610 tons. Applies to broken chunks of asphalt)
- b. Concrete: .93 (ex. 1000 CY Concrete = 930 tons. Applies to broken chunks of concrete)

c. Ferrous Metals: .22 (ex. 1000 CY Ferrous Metal = 220 tons)

d. Non-Ferrous Metals: .10 (ex. 1000 CY Non-Ferrous Metals = 100 tons)

e. Drywall Scrap: .20

f. Wood Scrap: .16

# CONTRACTOR'S REUSE, RECYCLING, AND DISPOSAL REPORT

(Submit With Each Progress Payment)

Project Title:						
Contract or Work Order No.:						
Contractor's Name:						
Street Address:						
City:				State:		Zip:
Phone: (    )				Fax: (    )		
E-Mail Address:						
Prepared by: (Print Name)						
Date Submitted:						
Project Period:		From:			TO:	
Reuse, Recycling or Disposal Processes to Be Used						
Describe the types of recycling processes or disposal activities that will be used for material generated in the project. Indicate the type of process or activity by number, types of materials, and estimated quantities that will be recycled or disposed in the sections below:						
01 - Reuse of building materials or salvage items on site (i.e. crushed base or red clay brick)						
02 - Salvaging building materials or salvage items at an offsite salvage or re-use center (i.e. lighting, fixtures)						
03 - Recycling source separated materials on site (i.e. crushing asphalt/concrete for reuse or grinding for mulch)						
04 - Recycling source separated materials at an offsite recycling center (i.e. scrap metal or green materials)						
05 - Recycling commingled loads of C&D materials at an offsite mixed debris recycling center or transfer station						
06 - Recycling material as Alternative Daily Cover at landfills						
07 - Delivery of soils or mixed inerts to an inert landfill for disposal (inert fill).						
08 - Disposal at a landfill or transfer station.						
09 - Other (please describe) _____						
Types of Material To Be Generated						
Use these codes to indicate the types of material that will be generated on the project						
A = Asphalt      C = Concrete      M = Metals      I = Mixed Inert      G = Green Materials						
D = Drywall      P/C=Paper/Cardboard      W/C = Wire/Cable      S= Soils (Non-Hazardous)						
M/C = Miscellaneous Construction Debris      R = Reuse/Salvage      W = Wood      O = Other (describe)						
Facilities Used: Provide Name of Facility and Location (City)						
Total Truck Loads: Provide Number of Trucks Hauled from Site During Reporting Period						
Total Quantities: If scales are available at sites, report in tons. If not, quantify by cubic yards. For salvage/reuse items, quantify by estimated weight (or units).						
SECTION I - RE-USED/RECYCLED MATERIALS						
Include all recycling activities for source separated or mixed material recycling centers where recycling will occur.						
Type of Material	Type of Activity	Facility to be Used/Location	Total Truck Loads	Total Quantities		
				Tons	Cubic YD	Other Wt.
(ex.) M	04	ABC Metals, Los Angeles	24	355		
a. Total Diversion						

# CONTRACTOR'S REUSE, RECYCLING, AND DISPOSAL REPORT

Continued

SECTION II - DISPOSED MATERIALS						
Include all disposal activities for landfills, transfer stations, or inert landfills where no recycling will occur.						
Type of Material	Type of Activity	Facility to be Used/Location	Total Truck Loads	Total Quantities		
				Tons	Cubic YD	Other Wt.
(ex.) D	08	DEF Landfill, Los Angeles	2	35		
b. Total Disposal						

SECTION III - TOTAL MATERIALS GENERATED			
This section calculates the total materials to be generated during the project period (Reuse/Recycle + Disposal = Generation)			
	Tons	Cubic YD	Other Wt.
a. Total Reused/Recycled			
b. Total Disposed			
c. Total Generated			

SECTION IV - CONTRACTOR'S LANDFILL DIVERSION RATE CALCULATION			
Add totals from Section I + Section II			
	Tons	Cubic YD	Other Wt.
a. Materials Re-Used and Recycled			
b. Materials Disposed			
c. Total Materials Generated (a. + b. = c.)			
d. Landfill Diversion Rate (Tonnage Only)*			

\* Use tons only to calculate recycling percentages: Tons Reused/Recycled/Tons Generated = % Recycled

Contractor's Comments (Provide any additional information pertinent to planned reuse, recycling, or disposal activities):

## Notes:

1. Suggested Conversion Factors: From Cubic Yards to Tons  
(Use when scales are not available)

- a. Asphalt: .61 (ex. 1000 CY Asphalt = 610 tons. Applies to broken chunks of asphalt)
- b. Concrete: .93 (ex. 1000 CY Concrete = 930 tons. Applies to broken chunks of concrete)

c. Ferrous Metals: .22 (ex. 1000 CY Ferrous Metal = 220 tons)

d. Non-Ferrous Metals: .10 (ex. 1000 CY Non-Ferrous Metals = 100 tons)

e. Drywall Scrap: .20

f. Wood Scrap: .16

**SECTION 01 78 00  
CLOSEOUT SUBMITTALS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Project record documents.
- B. Warranties and bonds.

**1.02 RELATED REQUIREMENTS**

- A. District issued Bidding Instructions and Contract General Conditions: Performance bond and labor and material payment bonds, warranty, and correction of work.
- B. Section 01 30 00 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- C. Section 01 45 33 - Code-Required Special Inspections: Construction oversight procedures by DSA regarding the execution, approval, and closeout of this building project.
- D. Section 01 70 00 - Execution and Closeout Requirements: Contract closeout procedures.
- E. Section 01 78 39 - Project Record Documents: Detailed requirements.
- F. Individual Product Sections: Specific requirements for operation and maintenance data.
- G. Individual Product Sections: Warranties required for specific products or Work.
  - 1. Special Project warranty requirements for specific products or elements of the Work; commitments and agreements for continuing services to District.

**1.03 DEFINITIONS**

- A. Warranty: Assurance to District by Contractor, installer, supplier, manufacturer or other party responsible as warrantor, for the quantity, quality, performance and other representations of a product, system service of the Work, in whole or in part, for the duration of the specified period of time.
- B. Guarantee: Assurance to District by Contractor or product manufacturer or other specified party, as guarantor, that the specified warranty will be fulfilled by the guarantor in the event of default by the warrantor.
- C. Standard Product Warranty: Preprinted, written warranty published by product manufacturer for particular products and specifically endorsed by the manufacturer to the District.
- D. Special Project Warranty: Written warranty required by or incorporated into Contract Documents, to extend time limits provided by standard warranty or to provide greater rights for District.
- E. Correction Period: As defined in the Conditions of the Contract, Correction Period shall be synonymous with "warranty period", "guarantee period" and similar terms used in the Contract Specifications.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 1
--	--	-------------------------------------

#### 1.04 SUBMITTALS

- A. Final Completion Submittals: Prior to application for final payment, Contractor shall submit 3 copies the following:
1. Agency Document Submittals: Submit to District all documents required by authorities having jurisdiction, including serving utilities and other agencies. Submit original versions of all permit cards, with final sign-off by inspectors. Submit all certifications of inspections and tests.
    - a. Complete all required Contractor forms and obtain DSA approval of these same forms. Comply with "Final Certification of Construction" per Title 24 Part 1 section 4-339.
      - 1) Form-6.C: Verified Report – Contractor: From each Contractor having a contract with the District.
  2. Final Specifications Submittals: Submit to District all documents and products required by Specifications to be submitted, including the following:
    - a. Project record drawings and specifications.
    - b. Guarantees, warranties and bonds.
    - c. Test reports and certificates of compliance.
  3. Lien and Bonding Company Releases: Submit to District, with copy to Architect, evidence of satisfaction of encumbrances on Project by completion and submission of The American Institute of Architects Forms:
    - a. G706 - Contractor's Affidavit of Payment of Debts and Claims;
    - b. G706A - Contractor's Affidavit of Release of Liens;
    - c. (if applicable) G707 - Consent of Surety;
    - d. or forms as as agreed to by the District.
    - e. Comply also with other requirements of District, as directed.
    - f. All signatures shall be notarized.
  4. Subcontractor List: Submit to two copies to District and two copies to Architect of updated Subcontractor and Materials Supplier List.
  5. Warranty Documents: Prepare and submit to District all warranties and bonds as specified in Contract General Conditions and this Section.
- B. Project Record Documents: Submit final progress markup PDF documents by uploading via Bluebeam to Architect with claim for final Application for Payment.
- C. Warranties and Bonds:
1. For equipment or component parts of equipment put into service during construction with District's permission, submit documents within 10 days after acceptance.
  2. Make other submittals within 10 days after Date of Final Inspection, prior to final Application for Payment.

#### 1.05 WARRANTIES AND GUARANTEES

- A. General:
1. Provide all warranties and guarantees with District named as beneficiary.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 2
--	--	-------------------------------------

2. For equipment and products, or components thereof, bearing a manufacturer's warranty or guarantee that extends for a period of time beyond the Contractor's warranty and guarantee, so state in the warranty or guarantee.
- B. Provisions for Special Warranties: Refer to Conditions of the Contract for terms of the Contractor's special warranty of workmanship and materials.
- C. General Warranty and Guarantee Requirements:
  1. Warranty shall be an agreement to repair or replace, without cost and undue hardship to District, Work performed under the Contract which is found to be defective during the Correction Period (warranty or guarantee) period.
  2. Repairs and replacements due to improper maintenance or operation, or due to normal wear, usage and weathering are excluded from warranty requirements unless otherwise specified.
- D. Specific Warranty and Guarantee Requirements: Specific requirements are included in product Specifications Technical Sections, including content and limitations.
- E. Disclaimers and Limitations:
  1. Manufacturer's disclaimers and limitations on product warranties and guarantees shall not relieve Contractor of responsibility for warranty and guarantee requirements.
  2. This applies to the Work that incorporates such products, nor shall they relieve suppliers, manufacturers, and installers required to countersign special warranties with Contractor.
- F. Related Damages and Losses: When correcting warranted Work that has been found defective, remove and replace other Work that has been damaged as a result of such defect or that must be removed and replaced to provide access for correction of warranted Work.
- G. Reinstatement of Warranty:
  1. When Work covered by a warranty has been found defective and has been corrected by replacement or rebuilding, reinstate the warranty by written endorsement.
  2. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- H. Replacement Cost:
  1. Upon determination that Work covered by a warranty has been found to be defective, replace or reconstruct the Work to a condition acceptable to District, complying with applicable requirements of the Contract Documents.
  2. Contractor is responsible for all costs for replacing or reconstructing defective Work regardless of whether District has benefited from use of the Work through a portion of its anticipated useful service life.
- I. District's Recourse:
  1. Written warranties made to the District are in addition to implied warranties, and do not limit the duties, obligations, rights and remedies otherwise available under law, nor shall warranty periods be interpreted as limitations on time in which the District can enforce such other duties, obligations, rights, or remedies.
  2. Rejection of Warranties:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 3
--	--	-------------------------------------

- a. The District reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- J. Warranty as Condition of Acceptance:
  - 1. District reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment shall be required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 PROJECT RECORD DOCUMENTS**

- A. See also Section 01 78 39 - Project Record Documents.
- B. Record Documents are to be maintained and submitted in searchable live electronic format (PDF), unflattened.
  - 1. Develop in compliance with Section 01 30 00 - Administrative Requirements.
  - 2. Acceptable markup software:
    - a. Adobe Acrobat Professional.
    - b. Bluebeam Revu.
- C. Maintain on site one set of the following record documents; record actual revisions to the Work:
  - 1. Contract Drawings.
  - 2. Project Manual with Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - 5. Reviewed shop drawings, product data, and samples.
  - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- D. Ensure entries are complete and accurate, enabling future reference by District.
- E. Store record documents separate from documents used for construction.
- F. Record information concurrent with construction progress.
- G. Specifications: Legibly mark and record at each product section description of actual products 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 modifications.
  - 4. Provide copies of all approved addenda, directives, corrections, and change orders affecting the associated project.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 4
--	--	-------------------------------------

- a. These copies shall be included with the "Bid Set" and/or "Record Set" listed above and formatted as detailed above.
- H. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
  - 1. Reproducible (PDF) set of Contract Drawings will be provided to Contractor by District through Architect or Construction Manager.
  - 2. Measured depths of foundations in relation to finish first floor datum.
  - 3. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 4. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 5. Field changes of dimension and detail.
  - 6. Details not on original Contract drawings.
    - a. Application of copies of details produced and provided by Architect during construction will be accepted.
  - 7. Sketches, clarifications (RFI's), Field Orders, Supplemental Instructions, Construction Change Documents, and Approved Change Orders
- I. Submission: Submit by uploading, Record Documents to Architect prior to each Application for Payment.
  - 1. Provide, by email, to the Architect, a download link the Record Documents consisting of an unflattened PDF format with live text and redline mark-ups, not scanned.
  - 2. Maintain one additional paper copy and one in PDF format (on CD) of the fire suppression and fire protection detection system drawings and specifications at the building premises.
    - a. One copy is to be kept on site for a period of three years to comply with CFC section 901.6.2.

### 3.02 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with District's permission, leave date of beginning of time of warranty until Date of Final Acceptance is determined.
- B. Project Warranty and Guarantee Forms:
  - 1. Example forms for special Project warranties and guarantees are included at the end of this Section.
  - 2. Prepare written documents utilizing the appropriate form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer.
    - a. Submit a draft to District through Architect for approval prior to final execution.
  - 3. Refer to product Technical Specifications Sections for specific content requirements, and particular requirements for submittal of special warranties.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 5
--	--	-------------------------------------



4. Prepare standard warranties and guarantees, excepting manufacturers' standard printed warranties and guarantees, on Contractor's, subcontractor's, material supplier's, or manufacturer's own letterhead, addressed to District.
  5. Warranty and guarantee letters shall be signed by all responsible parties and by Contractor in every case, with modifications only as approved in advance by District to suit the conditions pertaining to the warranty or guarantee.
- C. Manufacturer's Guarantee Form:
1. Manufacturer's guarantee form may be used in lieu of special Project form included at the end of this Section.
  2. Manufacturer's guarantee form shall contain appropriate terms and identification, ready for execution by the required parties.
  3. If proposed terms and conditions restrict guarantee coverage or require actions by District beyond those specified, submit draft of guarantee to District through Architect for review and acceptance before performance of the Work.
  4. In other cases, submit draft of guarantee to District through Architect for approval prior to final execution of guarantee.
- D. Signatures: Signatures shall be by person authorized to sign warranties, guarantees and bonds on behalf of entity providing such warranty, guarantee or bond.
- E. Co-Signature: All installer's warranties and bonds shall be co-signed by Contractor. Manufacturer's guarantees will not require co-signature.
- F. Verify that documents are in proper form, contain full information, and are notarized.
- G. Co-execute submittals when required.
- H. Retain warranties and bonds until time specified for submittal.
- I. Form of Warranty and Bond Submittals:
1. Prior to final Application and Certificate for Payment, compile two copies of each required warranty, guarantee and bond, properly executed by Contractor, or jointly by Contractor, subcontractor, supplier, or manufacturer.
  2. Collect and assemble all written warranties and guarantees into binders and deliver binders to District for final review and acceptance.
  3. Include Table of Contents for binder, neatly typed, following order and Section numbers and titles as used in the Project Manual.
  4. Provide heavy paper dividers with celluloid or plastic covered tabs for each separate warranty.
    - a. Mark tabs to identify products or installation, and Section number and title.
  5. Include on separate typed sheet, if information is not contained in warranty or guarantee form, a description of the product or installation, and the name, address, telephone number and responsible person for applicable installer, supplier and manufacturer.
  6. When operating and maintenance data manuals are required for warranted construction, include additional copies of each required warranty and guarantee in each required manual.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 6
--	--	-------------------------------------

- a. Coordinate with requirements listed in the prior articles for operating and maintenance data manuals.

### **3.03 TIME OF WARRANTY AND BOND SUBMITTALS**

- A. Submission of Preliminary Copies:
  1. Unless otherwise specified, obtain preliminary copies of warranties, guarantees and bonds within ten days of completion of applicable item or Work.
  2. Prepare and submit preliminary copies for review as specified herein.
- B. Submission of Final Copies:
  1. Submit fully executed copies of warranties, guarantees and bonds within ten days of date identified in Certificate of Completion but no later than three days prior to date of final Application for Payment.
- C. Date of Warranties and Bonds:
  1. Unless otherwise directed or specified, commencement date of warranty, guarantee and bond periods shall be the date established in the Certificate of Completion.
  2. Warranties for Work accepted in advance of date stated in Certificate of Completion:
    - a. When a designated system, equipment, component parts or other portion of the Work is completed and occupied or put to beneficial use by District:
      - 1) By separate agreement with Contractor, prior to completion date established in the Certificate of Completion, submit properly executed warranties to District within ten days of completion of that designated portion of the Work.
      - 2) List date of commencement of warranty, guarantee or bond period as the date established in the Certificate of Completion.
  3. Warranties for Work not accepted as of date established in the Certificate of Completion:
    - a. Submit documents within ten days after acceptance, listing date of acceptance as beginning of warranty, guarantee or bond period.
- D. Duration of Warranties and Guarantees:
  1. Unless otherwise specified or prescribed by law, warranty and guarantee periods shall be not less than the Correction Period required by the Conditions of the Contract.
  2. In no case, the period is to be less than one year from the date established for completion of the Project in the Certificate of Completion.
  3. See product Specifications Sections of the Project Manual for extended warranty and guarantee beyond the minimum one year duration.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Closeout Submittals 01 78 00 - 7
--	--	-------------------------------------

**SECTION 01 78 00.01  
WARRANTY FORM LETTER**

**FOR CONTRACTOR'S / SUBCONTRACTOR'S / MANUFACTURER'S WARRANTY**

CONTRACTOR'S/SUBCONTRACTOR'S/SUPPLIER'S LETTERHEAD

**SPECIAL LIMITED PROJECT WARRANTY FOR \_\_\_\_\_ WORK.**

We, the undersigned, do hereby warrant that the portion of the Work described above which we have provided for Childcare Center Shade Structure is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements.

We agree to repair or replace Work installed by us, together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of (years), commencing (date identified in Certificate of Completion, unless otherwise directed) and terminating (date).

The following terms and conditions apply to this warranty (obtain District 's approval before submission):

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by the District , after notification in writing, we, the undersigned, all collectively and separately, hereby authorize the District to have said defective Work repaired or replaced to be made good, and agree to pay to the District upon demand all moneys that the District may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

**LOCAL REPRESENTATIVE: FOR WARRANTY MAINTENANCE, REPAIR, OR REPLACEMENT SERVICE, CONTACT:**

(Name) \_\_\_\_\_  
(Address) \_\_\_\_\_  
(City) \_\_\_\_\_ (State) \_\_\_\_\_ (ZIP) \_\_\_\_\_  
(Phone) \_\_\_\_\_ / \_\_\_\_\_  
(signed) \_\_\_\_\_  
(Typed Name) \_\_\_\_\_ (Date) \_\_\_\_\_  
(Title) \_\_\_\_\_ (Firm) \_\_\_\_\_

**CONTRACTOR:**

State License No: \_\_\_\_\_  
(signed) \_\_\_\_\_  
(Date) \_\_\_\_\_ (Typed Name) \_\_\_\_\_  
(Title) \_\_\_\_\_ (Firm) \_\_\_\_\_

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Warranty Form Letter 01 78 00.01 - 1
--	--	---

**FORM LETTER**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Warranty Form Letter 01 78 00.01 - 2
--	--	---

## FORM LETTER

### FOR CONTRACTOR'S / MANUFACTURER'S GUARANTEE

CONTRACTOR'S / MANUFACTURER'S LETTERHEAD

#### SPECIAL LIMITED PROJECT [\_\_ WARRANTY\_\_] [\_\_ GUARANTEE\_\_] FOR \_\_\_\_\_ WORK.

We, the undersigned, do hereby [\_\_ warrant\_\_] [\_\_ guarantee\_\_] that the portion of the Work described above which [\_\_ we have provided\_\_] [\_\_ was provided by (Installer or Subcontractor's Name)\_\_] for Childcare Center Shade Structure in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by [\_\_ us, \_\_] [\_\_ (Installer or Subcontractor's Name)\_\_] together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of (years), commencing (date indicated in Certificate of Completion, unless otherwise directed) and terminating (date).

The following terms and conditions apply to this [\_\_ warranty\_\_] [\_\_ guarantee\_\_] (obtain District's approval before submission):

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by the District, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize the District to have said defective Work repaired or replaced to be made good, and agree to pay to the District upon demand all moneys that the District may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

#### LOCAL REPRESENTATIVE: FOR WARRANTY MAINTENANCE, REPAIR, OR REPLACEMENT SERVICE, CONTACT:

(Name) \_\_\_\_\_  
(Address) \_\_\_\_\_  
(City) \_\_\_\_\_ (State) \_\_\_\_\_ (ZIP) \_\_\_\_\_  
(Phone) \_\_\_\_\_ / \_\_\_\_\_  
(signed) \_\_\_\_\_  
(Date) \_\_\_\_\_ (Typed Name) \_\_\_\_\_  
(Title) \_\_\_\_\_ (Firm) \_\_\_\_\_

#### CONTRACTOR:

State License No: \_\_\_\_\_  
(signed) \_\_\_\_\_  
(Date) \_\_\_\_\_ (Typed Name) \_\_\_\_\_  
(Title) \_\_\_\_\_ (Firm) \_\_\_\_\_

## FORM LETTER

END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Warranty Form Letter 01 78 00.01 - 4
--	--	---

**SECTION 01 78 39**  
**PROJECT RECORD DOCUMENTS**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Record Drawings.
- B. Record Specifications.
- C. Record Product Data.
- D. Record Samples.
- E. Record Photos.
- F. Miscellaneous record submittals.

**1.02 RELATED REQUIREMENTS:**

- A. Section 01 20 00 - Price and Payment Procedures: Schedule of Values.
- B. Section 01 30 00 - Administrative Requirements: Project Coordination.
- C. Section 01 78 00 - Closeout Submittals: General Closeout.

**1.03 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Project Record Documents: Recorded actual locations.

**PART 2 -PRODUCTS - NOT USED**

**PART 3 - EXECUTION**

**3.01 RECORD DRAWINGS**

- A. Record Documents: Maintain one set of marked-up PDF copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
  - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
    - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
    - b. Accurately record information in an acceptable drawing technique.
    - c. Record data as soon as possible after obtaining it.
    - d. Record and check the markup before enclosing concealed installations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 1
--	--	--

- e. Cross-reference record prints to corresponding archive photographic documentation.
- 2. Content: Types of items requiring marking include, but are not limited to, the following:
  - a. Field changes of dimensions from Drawings.
  - b. Revisions to details shown on Drawings.
    - 1) Details not on original Contract Drawings. Application of copies of details produced and provided by Architect during construction will be accepted.
  - c. Depths of foundations and footing, measured in relation to finish First Floor datum.
  - d. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent ground improvements.
  - e. Revisions to routing of piping and conduits.
  - f. Revisions to electrical circuits.
  - g. Actual equipment locations and sizes.
  - h. Duct size and routing.
  - i. Locations of concealed internal utilities.
  - j. Permanent Room names and Room numbers.
  - k. Changes made by Change Order or Construction Change Directive.
  - l. Changes made following written orders by District or Construction Manager.
  - m. Changes made following Architect's written orders.
  - n. Note clarifications from RFI's.
  - o. Field records for variable and concealed conditions.
  - p. Record information on the Work that is shown only schematically.
- 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
- 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked-up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings, as follows:
  - 1. Format: Same digital data software program, version, and operating system as the original Contract Drawings.
    - a. Format: DWG, Version, Microsoft Windows operating system.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 2
--	--	--



2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
  3. Refer instances of uncertainty to Architect and Construction Manager for resolution.
  4. Architect will furnish Contractor one set of digital data files of the Contract Drawings for use in recording information.
    - a. See Section 01 35 50 - Requests for Electronic Files for requirements related to use of Architect's digital data files.
    - b. Architect will provide data file layer information. Record markups in separate layers.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
  2. Consult Architect and Construction Manager for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  2. Format: Annotated PDF electronic file with comment function enabled.
  3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
  4. Identification:
    - a. Project name and number.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect and Construction Manager.
    - e. Name of Contractor.

### 3.02 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications in PART 2 to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 3
--	--	--

3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
  5. Note related Change Orders, record Product Data, and Record Drawings, where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file.

### **3.03 RECORD PRODUCT DATA**

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file.
1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

### **3.04 RECORD SAMPLES**

- A. Immediately before date of Substantial Completion, meet with District or Construction Manager at Project site to determine which Samples maintained during the construction period are to be transmitted to District or Construction Manager for record purposes.
- B. Comply with District or Construction Manager's instructions for packaging, identification, marking, and delivery to District or Construction Manager's Sample storage space. Dispose of other Samples in the manner specified for disposing surplus and waste materials

### **3.05 RECORD PHOTOS**

- A. Photograph all work before covering up, including:
1. All open trenches and manholes shall be photographed.
  2. All exposed utilities should be identified in the photos.
  3. Show photograph locations and dates on Record Drawings.

### **3.06 MISCELLANEOUS RECORD SUBMITTALS**

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
1. Field records on excavations and foundations.
  2. Field records on underground construction and similar work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 4
--	--	--

3. Surveys showing locations and elevations of underground lines.
  4. Invert elevations of drainage piping.
  5. Surveys establishing building lines and levels.
  6. Authorized measurements using unit prices or allowances.
  7. Records of plant treatment.
  8. Ambient and substrate condition tests.
  9. Certifications received in lieu of labels on bulk products.
  10. Batch mixing and bulk delivery records.
  11. Testing and qualification of trade persons.
  12. Documented qualification of installation firms.
  13. Load and performance testing.
  14. Inspections and certifications by governing authorities.
  15. Leakage and water-penetration tests.
  16. Fire-resistance and flame-spread test results.
  17. Final inspection and correction procedures.
- B. Format: Submit miscellaneous record submittals as PDF electronic file.
1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

### **3.07 SUBMISSION**

- A. Keep Project Record Documents current, as they will be reviewed for completeness by Architect, Engineer, Project Inspector, and Construction Manager; as a condition of certification for each Progress Payment Application.
- B. Prior to the date of the Notice of Completion, submit marked Record Documents to Architect and Construction Manager for review, approval and further processing.

### **3.08 RECORDING AND MAINTENANCE**

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Review of documents by Architect, Engineer, Project Inspector, or Construction Manager to be in concert with approval of the monthly Application for Payment.
- C. Maintenance of Record Documents and Samples:
  1. Store record documents and Samples in the field office apart from the Contract Documents used for construction.
  2. Do not use project record documents for construction purposes.
  3. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 5
--	--	--

4. Provide access to project record documents for Architect and Construction Manager reference during normal working hours.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Project Record Documents 01 78 39 - 6
--	--	--

## **SECTION 02 41 00 DEMOLITION**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Selective demolition of built site elements.
  - 1. Demolition and removal of existing site improvements within Project area, as indicated on Drawings and as necessary to accomplish the Work, including:
    - a. Asphaltic concrete and portland cement concrete paving.
    - b. Abandoned underground utility lines outside of utility easement.
    - c. Pavement cutting and removal.
    - d. Debris removal.
  - 2. Handling and disposal of removed materials.
  - 3. Dewatering of excavations as necessary to control surface and sub-surface water.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 01 10 00 - Summary: Limitations on Contractor's use of site and premises.
- B. Section 01 10 00 - Summary: Description of items to be removed by District.
- C. Section 01 50 00 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- D. Section 01 60 00 - Product Requirements: Handling and storage of items removed for salvage and relocation.
- E. Section 01 70 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- F. Section 01 74 19 - Construction Waste Management and Disposal: Limitations on disposal of removed materials; requirements for recycling.
- G. Section 31 23 23 - Fill: Filling holes, pits, and excavations generated as a result of removal operations.

#### **1.03 REFERENCE STANDARDS**

- A. 29 CFR 1926 - Safety and Health Regulations for Construction.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations.

#### **1.04 DEFINITIONS**

- A. Remove: Remove and legally dispose of items, except those identified for use in recycling, re-use, and salvage programs.
- B. Environmental Pollution and Damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 1
--	--	----------------------------

ecological balances of importance to human or animal life; affect other species of importance to humanity; or degrade the utility of the environment for aesthetic, cultural or historical purposes.

- C. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively for the purpose of disposal.
  - 1. Inert Solids/Inert Waste: Non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous substances or soluble pollutants at concentrations in excess of water-quality standards established by a regional water board and does not contain significant quantities of decomposable solid waste.
- D. Class III Landfill: A landfill that accepts non-hazardous materials such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities permit from the State of California.
- E. Demolition Waste: Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel. The materials may include rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.
- F. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals and inorganic wastes.
- G. Recycling: The process of sorting, cleansing, treating and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.
- H. Reuse: The use, in the same or similar form as it was produced, of a material which might otherwise be discarded.
- I. Solid Waste: All putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. "Solid waste" does not include hazardous waste, radioactive waste, or medical waste as defined or regulated by State law.

#### 1.05 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Construction Conference: Conduct a pre-construction conference one week prior to the start of the work of this section; require attendance by all affected trades.
- B. Convene a conference at the Project site 3 days prior to starting demolition to review the Drawings and Specifications, requirements of authorities having jurisdiction, instructions and requirements of serving utilities, sequencing and interface considerations and project conditions.
- C. Conference shall be attended by Construction Manager, supervisory and quality control personnel of Contractor and all subcontractors performing this and directly-related Work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 2
--	--	----------------------------

- D. Submit minutes of meeting to District, Project Inspector and Architect, for Project record purposes.
- E. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.
  - 1. Refer to sequence requirements specified in Section 01 10 00 - Summary; and construction progress schedule requirements specified in Section 01 32 16 - Construction Progress Schedule.

#### **1.06 MATERIALS OWNERSHIP**

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain property of Grossmont Union High School District, demolished materials shall become the Contractor's property and shall be removed, recycled, or disposed from Project site in an appropriate and legal manner.
  - 1. Arrange a meeting no less than ten (10) days prior to demolition with the District or Construction Manager and other designated representatives to review any salvagable items to determine if District wants to retain ownership, and discuss Contractor's Waste Management and Recycling Plan.

#### **1.07 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Demolition phase:
  - 1. Proposed dust-control measures.
  - 2. Proposed noise-control measures.
  - 3. Schedule of demolition activities indicating the following:
    - a. Detailed sequence of demolition and removal work, including start and end dates for each activity.
    - b. Dates for shutoff, capping, and continuation of utility services.
  - 4. Contractor's Waste Management and Recycling Plan: See Section 01 74 19 - Construction Waste Management and Disposal.
    - a. This plan will not otherwise relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
  - 5. Contractor's Reuse, Recycling, and Disposal Report: See Section 01 74 19 - Construction Waste Management and Disposal.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.
  - 1. Record drawings: Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

#### **1.08 SUBMITTALS**

- A. Demolition and Removal Procedures and Schedule: Submit for Project record only.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 3
--	--	----------------------------

- B. Project Record Drawings: Submit in accordance with provisions specified in Section 01 78 00 - Closeout Submittals. Indicate verified locations of underground utilities and storm drainage system on project record drawings.

### **1.09 QUALITY ASSURANCE**

- A. Demolition Firm Qualifications: Company specializing in the type of work required.
  - 1. Minimum of 5 years of documented experience.

### **1.10 SCHEDULING**

- A. Schedule Work to precede new construction.
- B. Describe demolition removal procedures and schedule.
- C. Perform work between the hours of 8am and 5pm, subject to noise abatement regulations and District's approval for noise considerations.

## **PART 2 PRODUCTS -- NOT USED**

## **PART 3 EXECUTION**

### **3.01 GENERAL PROCEDURES AND PROJECT CONDITIONS**

- A. Conform to the relevant Article of the General Conditions, South Coast Air Quality Management District and other applicable regulatory procedures when discovering hazardous or contaminated materials.
- B. Field Measurements and Conditions:
  - 1. Survey existing conditions and correlate with requirements indicated to determine extent of demolition and recycling required.
  - 2. In addition to provisions of the Conditions of the Contract, verify dimensions and field conditions prior to construction. Verify condition of substrate and adjoining Work before proceeding with demolition Work. If conflict is found notify Construction Manager, Project Inspector and Architect.
- C. Comply with other requirements specified in Section 01 70 00.
- D. Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Obtain and pay for all permits required.
- E. Environmental Controls
  - 1. Comply with federal, state and local regulations pertaining to water, air, solid waste, recycling, chemical waste, sanitary waste, sediment and noise pollution.
  - 2. Confine demolition activities to areas defined by public roads, easements, and work area limits indicated on the drawings.
  - 3. Temporary Construction: Remove indications of temporary construction facilities, such as haul roads, work areas, structures, stockpiles or waste areas.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 4
--	--	----------------------------



4. Water Resources: Comply with applicable regulations concerning the direct or indirect discharge of pollutants to underground and natural surface waters.
  - a. Oily Substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water in such quantities as to affect normal use, aesthetics, or produce a measurable ecological impact on the area.
    - 1) Store and service construction equipment at areas designated for collection of oil wastes.
5. Dust Control, Air Pollution, and Odor Control: Prevent creation of dust, air pollution and odors.
  - a. Use temporary enclosures and other appropriate methods to limit dust and dirt rising and scattering in air to lowest practical level.
  - b. Store volatile liquids, including fuels and solvents, in closed containers.
  - c. Properly maintain equipment to reduce gaseous pollutant emissions.
6. Noise Control: Perform demolition operations to minimize noise.
  - a. Provide equipment, sound-deadening devices, and take noise abatement measures that are necessary to comply with the requirements of this Contract.
- F. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
  1. Obtain required permits.
  2. Comply with applicable requirements of NFPA 241.
  3. Use of explosives is not permitted.
  4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
    - a. Survey condition of the building to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
      - 1) Retain a licensed and qualified civil or structural engineer to provide analysis, including calculations, necessary to ensure the safe execution of the demolition work.
    - b. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.
    - c. Perform surveys as the Work progresses to detect hazards resulting from demolition activities.
  5. Provide, erect, and maintain temporary barriers and security devices.
    - a. Provide, erect, and maintain temporary barriers, safety and security devices , for protection of streets, sidewalks, curbs, adjacent property and the public.
    - b. Protection: Protect existing construction and adjacent areas with temporary barriers and security devices in accordance with requirements specified in Section 01 50 00 - Temporary Facilities and Controls.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 5
--	--	----------------------------

- 1) Review location and type of construction of temporary barriers with District and/or the Construction Manager.
  - 2) Barriers shall control dust, debris and provide protection for persons occupying and using adjacent facilities.
  - 3) Maintain protected egress and access at all times, in accordance with requirements of authorities having jurisdiction and with permission of Construction Manager (AHJ having jurisdiction).
6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
  7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
  8. Do not close or obstruct roadways or sidewalks without permit.
  9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
  10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.
- G. Do not begin removal until receipt of notification to proceed from District.
- H. Do not begin removal until built elements to be salvaged or relocated have been removed.
- I. Protect existing structures and other elements that are not to be removed.
1. Provide bracing and shoring.
  2. Prevent movement or settlement of adjacent structures.
  3. Stop work immediately if adjacent structures appear to be in danger.
  4. Protect existing landscaping materials, appurtenances, structures and items that are not to be demolished, or are on adjacent property.
  5. Mark location of utilities.
- J. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
- K. Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.
- L. Remove materials to be re-installed or retained in manner to prevent damage. Store and protect in accordance with requirements of Section 01 60 00 - Product Requirements.
- M. Perform demolition in a manner that maximizes salvage and recycling of materials.
1. Comply with requirements of Section 01 74 19 - Construction Waste Management and Disposal.
  2. Dismantle existing construction and separate materials.
  3. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.
- N. Damages: Promptly repair damages to adjacent facilities caused by demolition operations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 6
--	--	----------------------------

### 3.02 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to District.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to District.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- H. Utility Lines, Posts and Structures:
  - 1. Work by Utility: Posts, conductors, guy wires, boxes, structures and equipment shown to be cleared or removed by the responsible utility company or agency shall be considered work under a separate contract.
  - 2. Coordination: The Contractor shall arrange, schedule and coordinate work by utility companies and agencies.
  - 3. Payment: Costs, if any, imposed by utility companies and agencies shall be included in the Contract Sum.

### 3.03 DEBRIS AND WASTE REMOVAL

- A. Remove debris, junk, and trash from site.
- B. Remove from site all materials not to be reused on site; comply with requirements of Section 01 74 19 - Waste Management.
- C. Remove temporary work.
- D. Leave site in clean condition, ready for subsequent work.
- E. Clean up spillage and wind-blown debris from public and private lands.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Demolition 02 41 00 - 7
--	--	----------------------------

**SECTION 03 30 00**  
**CAST-IN-PLACE CONCRETE**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Concrete formwork.
- B. Concrete reinforcement.
- C. Joint devices associated with concrete work.
- D. Concrete curing.

**1.02 REFERENCE STANDARDS**

- A. ACI 117 - Specifications for Tolerances for Concrete Construction and Materials.
- B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
- C. ACI 301 - Specifications for Structural Concrete.
- D. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete.
- E. ACI 305R - Guide to Hot Weather Concreting.
- F. ACI 306R - Guide to Cold Weather Concreting.
- G. ACI 308R - Guide to External Curing of Concrete.
- H. ACI 318 - Building Code Requirements for Structural Concrete.
- I. ACI 347R - Guide to Formwork for Concrete.
- J. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
- K. ASTM C33/C33M - Standard Specification for Concrete Aggregates.
- L. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- M. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
- N. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50 mm] Cube Specimens).
- O. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete.
- P. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
- Q. ASTM C827/C827M - Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures.
- R. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
- S. ASTM C979/C979M - Standard Specification for Pigments for Integrally Colored Concrete.

- T. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
- U. ASTM C1602/C1602M - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete.

### 1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
  - 1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.
- C. Mix Design: Submit proposed concrete mix design.
  - 1. Indicate proposed mix design complies with requirements of ACI 301, Section 4 - Concrete Mixtures.
  - 2. Indicate proposed mix design complies with requirements of ACI 318, Chapter 19 - Concrete: Design and Durability Requirements, and Chapter 26 - Construction Documents and Inspection.
  - 3. Mix Design: Submit mix designs prepared, stamped and signed by a Civil Engineer licensed in the State of California.
- D. Quality Control Submittals:
  - 1. Field tests: Submit reports of all slump, strength and air content tests as required by authorities having jurisdiction and as indicated on the Drawings and specified herein.
  - 2. Delivery tickets: Have available copies of delivery tickets complying with ASTM C94/C94M for each load of concrete delivered to site. Include on the tickets the additional information specified in the ASTM document.
- E. Test Reports: Submit report for each test or series of tests specified.
- F. Manufacturer's Installation Instructions: For concrete accessories, indicate installation procedures and interface required with adjacent construction.
- G. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.

### 1.04 QUALITY ASSURANCE

- A. Perform work of this section in accordance with ACI 301 and ACI 318.
  - 1. Maintain one copy of each document on site.
- B. Follow recommendations of ACI 305R when concreting during hot weather.
- C. Follow recommendations of ACI 306R when concreting during cold weather.
- D. Regulatory Requirements:
  - 1. Conform to California Building Code (CBC) Chapter 19A requirement, as amended and adopted by authorities having jurisdiction.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 2
--	--	--

2. Chemical products field-applied to concrete shall comply with applicable air quality requirements of authorities having jurisdiction.
  - a. Comply with Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions, CALGreen Section 5.504.4 Finish material pollutant control; 5.504.4.1 Adhesives, sealants and caulks; 5.504.4.3 Paints and coatings.
  - b. Comply with CALGreen Section A5.405.4 Recycled content.
  - c. Comply with CALGreen Section A5.406 Enhanced Durability and Reduced Maintenance.
- E. Testing Agency Services: District will engage an independent testing and inspection agency to conduct tests and perform other services specified for quality control during construction, as required by Section(s) 01 40 00 - Quality Requirements and 01 45 33 - Code-Required Special Inspections.
- F. Coordination: Coordinate the placement of joint devices with erection of concrete formwork and placement of form accessories. Coordinate concrete requirements with Work specified for underground utilities and mechanical and electrical equipment pads and bases.

#### **1.05 DELIVERY AND HANDLING**

- A. Protection During Concrete Placement: Provide protective coverings and runways, and use appropriate equipment and means of access to Work areas to avoid soiling or damage to existing conditions.
- B. Runoff: Prevent run off of water contaminated by construction agents and chemicals from soiling existing surfaces and from contaminating existing and future landscape areas.

#### **1.06 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.

### **PART 2 PRODUCTS**

#### **2.01 FORMWORK**

- A. Formwork Design and Construction: Comply with guidelines of ACI 347R to provide formwork that will produce concrete complying with tolerances of ACI 117.
- B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
  1. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
  2. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

#### **2.02 REINFORCEMENT MATERIALS**

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
  1. Type: Deformed billet-steel bars.
  2. Finish: Unfinished, unless otherwise indicated.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 3
--	--	--

- B. Reinforcement Accessories:
  - 1. Tie Wire: Annealed, minimum 16 gauge, 0.0508 inch.

### 2.03 CONCRETE MATERIALS

- A. Cement: ASTM C150/C150M, Type V - Sulfate Resistant Portland type.
  - 1. Acquire cement for entire project from same source.
- B. Fine and Coarse Aggregates: ASTM C33/C33M.
  - 1. Acquire aggregates for entire project from same source.
  - 2. Fine and coarse aggregates, CBC Title 24, Part 2.
- C. Water: ASTM C1602/C1602M; clean, potable, and not detrimental to concrete.

### 2.04 ADMIXTURES

- A. Use no admixtures not included in mix design. Products of the following manufacturers are specified and will be acceptable provided they comply with referenced standards all other requirements of the Contract Documents:
- B. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.
- C. Water Reducing and Accelerating Admixture: ASTM C494/C494M Type E.
  - 1. Products:
    - a. Euclid Chemical Company; ACCELGUARD 80: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - b. Substitutions: See Section 01 60 00 - Product Requirements.
- D. Water Reducing and Retarding Admixture: ASTM C494/C494M Type D.
  - 1. Provide pigmented type, with ASTM C979/C979M inorganic pigments.
  - 2. Products:
    - a. Substitutions: See Section 01 60 00 - Product Requirements.
- E. Water Reducing Admixture: ASTM C494/C494M Type A.
  - 1. Products:
    - a. Euclid Chemical Company; EUCON NW: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - b. Substitutions: See Section 01 60 00 - Product Requirements.

### 2.05 ACCESSORY MATERIALS

- A. Non-Shrink Cementitious Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
  - 1. Grout: Comply with ASTM C1107/C1107M.
  - 2. Height Change, Plastic State; when tested in accordance with ASTM C827/C827M:
    - a. Maximum: Plus 4 percent.
    - b. Minimum: Plus 1 percent.
  - 3. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 4
--	--	--

4. Minimum Compressive Strength at 28 Days: 5,000 pounds per square inch.
5. Products containing aluminum powder are not permitted.
6. Flowable Products:
  - a. Dayton Superior Corporation: [www.daytonsuperior.com/#sle](http://www.daytonsuperior.com/#sle).
  - b. L&M Construction Chemicals, Inc, a subsidiary of Laticrete International, Inc; DURAGROUT: [www.laticrete.com/our-products/concrete-construction-chemicals/#sle](http://www.laticrete.com/our-products/concrete-construction-chemicals/#sle).
  - c. SpecChem, LLC; SC Precision Grout: [www.specchemllc.com/#sle](http://www.specchemllc.com/#sle).
  - d. W. R. Meadows, Inc; 588-10K: [www.wrmeadows.com/#sle](http://www.wrmeadows.com/#sle).
  - e. W. R. Meadows, Inc; 1428 HP: [www.wrmeadows.com/#sle](http://www.wrmeadows.com/#sle).
  - f. Substitutions: See Section 01 60 00 - Product Requirements.
7. Low-Slump, Dry Pack Products:
  - a. Dayton Superior Corporation: [www.daytonsuperior.com/#sle](http://www.daytonsuperior.com/#sle).
  - b. L&M Construction Chemicals, Inc, a subsidiary of Laticrete International, Inc; Duragrout: [www.lmcc.com/#sle](http://www.lmcc.com/#sle).
  - c. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.06 BONDING AND JOINTING PRODUCTS

- A. Epoxy Bonding System:
  1. Complying with ASTM C881/C881M and of Type required for specific application.
  2. Products:
    - a. Adhesives Technology Corporation: [www.atcepoxy.com/#sle](http://www.atcepoxy.com/#sle).
    - b. Euclid Chemical Company; DURAL FAST SET LV: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - c. Euclid Chemical Company; DURALFLEX GEL: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - d. Euclid Chemical Company; DURALFLEX LV: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - e. Euclid Chemical Company; DURAL 452 GEL, DURAL 452 LV, or DURAL 452 MV: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
    - f. Dayton Superior Corporation: [www.daytonsuperior.com/#sle](http://www.daytonsuperior.com/#sle).
    - g. SpecChem, LLC; SpecPoxy 1000, SpecPoxy 2000, SpecPoxy 3000, or SpecPoxy 3000FS: [www.specchemllc.com/#sle](http://www.specchemllc.com/#sle).
    - h. W. R. Meadows, Inc; Rezi-Weld Gel Paste, Rezi-Weld Gel Paste State, Rezi-Weld 1000: [www.wrmeadows.com/#sle](http://www.wrmeadows.com/#sle).
    - i. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.07 CURING MATERIALS

- A. Evaporation Reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.
  1. Products:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 5
--	--	--



- a. Dayton Superior Corporation: [www.daytonsuperior.com/#sle](http://www.daytonsuperior.com/#sle).
  - b. Euclid Chemical Company ; EUCOBAR: [www.euclidchemical.com/#sle](http://www.euclidchemical.com/#sle).
  - c. Nox-Crete Inc; Monofilm: [www.nox-crete.com/#sle](http://www.nox-crete.com/#sle).
  - d. SpecChem, LLC; SpecFilm Concentrate or SpecFilm: [www.specchemllc.com/#sle](http://www.specchemllc.com/#sle).
  - e. W. R. Meadows, Inc ; Evapre or Evapre-RTU: [www.wrmeadows.com/#sle](http://www.wrmeadows.com/#sle).
  - f. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Water: Potable, not detrimental to concrete.

## 2.08 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.
- B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI 301.
- C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.
- D. Normal Weight Concrete:
  - 1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: As indicated on drawings.
  - 2. Water-Cement Ratio: As indicated on Structural Drawings.
  - 3. Maximum Slump: 3 inches.
  - 4. Maximum Aggregate Size: 1 inch.
    - a. Structural Concrete: Maximum size not larger than 1/5 of narrowest dimension between forms, 1/3 depth of slab nor 3/4 of minimum clear spacing between individual reinforcing bars.
    - b. Other than Structural Concrete: Conform to requirements for structural concrete.

## 2.09 MIXING

- A. Transit Mixers: Comply with ASTM C94/C94M.
- B. Adding Water: If concrete arrives on-site with slump less than suitable for placement, do not add water that exceeds the maximum water-cement ratio or exceeds the maximum permissible slump.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verify lines, levels, and dimensions before proceeding with work of this section.
- B. Verify that concrete cover requirements are met in formwork construction and reinforcement placement.
- C. Verify that all embedded products and formed openings and recesses are correctly placed.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 6
--	--	--

### 3.02 PREPARATION

- A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.
- B. Verify that forms are clean and free of rust before applying release agent.
- C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.
- D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning and applying bonding agent in according to bonding agent manufacturer's instructions.
  - 1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
  - 2. Use latex bonding agent only for non-load-bearing applications.

### 3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

- A. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.

### 3.04 CONCRETE MIXING

- A. Concrete Mixing, General: Comply with ACI 318 as adopted by CBC, Title 24, Part 2, Chapter 19A and ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete. Introduce and mix admixtures in compliance with manufacturer's instructions and recommendations.

### 3.05 PLACING CONCRETE

- A. Notify District's Inspector and at least 2 working days in advance of placing concrete.
- B. Place concrete in accordance with ACI 304R.
  - 1. General: Comply with ACI 318 as adopted by CBC, Title 24, Part 2, Chapter 19A and as follows:
    - a. Schedule continuous placement of concrete to prevent the formation of cold joints.
    - b. Deliver ready mix concrete in accordance with ASTM C94/C94M. Place concrete within 90 minutes after start of mixing.
    - c. Provide construction joints if concrete for a particular element or component cannot be placed in a continuous operation.
      - 1) Submit for review, proposed locations of joints prior to pouring. See Structural Drawings for additional requirements.
    - d. Deposit concrete as close as possible to its final location, to avoid segregation.
  - 2. Placement in Forms: Limit horizontal layers to depths which can be properly consolidated, but in no event greater than 24 inches.
    - a. Consolidate concrete by means of mechanical vibrators, inserted vertically in freshly placed concrete in a systematic pattern at close intervals. Penetrate previously

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 7
--	--	--

- placed concrete to ensure that separate concrete layers are knitted together.
- b. Vibrate concrete sufficiently to achieve consistent consolidation without segregation of coarse aggregates.
- c. Do not use vibrators to move concrete laterally.
- C. Hot Weather Placement: Comply with recommendations of ACI 305R when ambient temperature before, during, or after concrete placement is expected to exceed 90 deg F or when combinations of high air temperature, low relative humidity, and wind speed are such that the rate of evaporation from freshly poured concrete would otherwise exceed 0.2 lbs./SF/Hr..
  - 1. Use evaporation reducer.
  - 2. Do not add water to approved concrete mixes under any conditions.
  - 3. Provide mixing water at lowest feasible temperature, and provide adequate protection of poured concrete to reduce rate of evaporation.
  - 4. Use fog nozzle to cool formwork and reinforcing steel immediately prior to placing concrete.
- D. Cold-Weather Placement: Comply with provisions of ACI 306R when air temperature has fallen to or is expected to fall below 40 deg F. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
  - 1. Uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
  - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
  - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise accepted in mix designs.
- E. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- F. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.

### 3.06 CONCRETE FINISHING

- A. Repair surface defects, including tie holes, immediately after removing formwork.
  - 1. Remove honeycombed areas and other defective concrete down to sound concrete, cutting perpendicular to surface or slightly undercutting without damaging reinforcement. Dampen patch location and area immediately surrounding it prior to applying bonding compound or patching mortar.
  - 2. Before bonding compound has dried, apply patching mixture matching original concrete in materials and mix except for omission of coarse aggregate, and using a blend of white and normal portland cement as necessary to achieve color match. Consolidate thoroughly and strike off slightly higher than surrounding surface.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 8
--	--	--

### 3.07 CURING AND PROTECTION

- A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
  - 1. Normal concrete: Not less than seven days.
- C. Formed Surfaces: Cure by moist curing with forms in place for full curing period.

### 3.08 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures for passage of Work specified in other Sections, after such Work is in place. Mix, place, and cure concrete as specified to blend with in-place construction. Provide other miscellaneous concrete filling shown or required to complete Work. Use non-shrink grout where required or indicated.

### 3.09 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 40 00 - Quality Requirements.
- B. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
- C. Provide free access to concrete operations at project site and cooperate with appointed firm.
- D. Submit proposed mix design to inspection and testing firm for review prior to commencement of concrete operations.
- E. Field Certifications: For all concrete, provide signed copy of batch plant's certificate stating quantity of each material, amount of water, admixtures, departure time and date accompanying each load of materials or concrete.
- F. Field Tests of Concrete: Perform tests in accordance with applicable California Building Code requirements, ACI 301 and requirements of authorities having jurisdiction.
- G. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.
- H. Compressive Strength Tests: ASTM C39/C39M, for each test, mold and cure four concrete test cylinders. Obtain test samples for every 2,000 sq ft - 50 cu yd or less and structural concrete of each class of concrete placed (CBC requirement).
  - 1. Test one cylinder at 7 days and two at 28 days after placement.
  - 2. Maintain fourth cylinder to be tested at 56 days only if 28-day test fails to meet strength requirement.
  - 3. Take one additional test cylinder during cold weather concreting and cure it at job site under same conditions as concrete it represents. Test cold weather cylinder at 28 days.
- I. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
- J. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 9
--	--	--

### 3.10 DEFECTIVE CONCRETE

- A. Test Results: The testing agency shall report test results in writing to Architect and Contractor within 24 hours of test.
- B. Defective Concrete: Concrete not complying with required lines, details, dimensions, tolerances or specified requirements.
- C. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.
  - 1. Obtain repair details from Architect (Structural Engineer) and approved by DSA before proceeding.
- D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Cast-in-Place Concrete 03 30 00 - 10
--	--	---

**SECTION 05 50 00  
METAL FABRICATIONS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Shop fabricated steel items.

**1.02 RELATED REQUIREMENTS**

- A. Section 03 30 00 - Cast-in-Place Concrete: Placement of metal fabrications in concrete.

**1.03 REFERENCE STANDARDS**

- A. AISC 201 - AISC Certification Program for Structural Steel Fabricators, Standard for Steel Building Structures.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
- C. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- D. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
- E. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination.
- F. AWS B2.1/B2.1M - Specification for Welding Procedure and Performance Qualification.
- G. AWS D1.1/D1.1M - Structural Welding Code - Steel.
- H. AWS D1.2/D1.2M - Structural Welding Code - Aluminum.
- I. IAS AC172 - Accreditation Criteria for Fabricator Inspection Programs for Structural Steel AC172.
- J. SSPC-PA 1 - Shop, Field, and Maintenance Coating of Metals.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. ICC ES Reports: If requested, ICC Evaluation Service report indicating conformance with ICC-ES Acceptance Criteria.
- C. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
  - 1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.
- D. Welders' Qualification Statement: Welders' certificates in accordance with AWS B2.1/B2.1M and dated no more than 12 months before start of scheduled welding work.
- E. Fabricator's Qualification Statement: Provide documentation showing steel fabricator is accredited under IAS AC172 or AISC 201.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 1
--	--	------------------------------------

## 1.05 QUALITY ASSURANCE

- A. Welder Qualifications: Welding processes and welding operators qualified in accordance with AWS D1.1/D1.1M and AWS D1.2/D1.2M and dated no more than 12 months before start of scheduled welding work.
- B. Fabricator Qualifications: A qualified steel fabricator that is accredited by IAS AC172 or AISC 201.
- C. Welder's Qualifications:
  - 1. Welding shall be performed by certified welders qualified in accordance with procedures specified in applicable referenced AWS standard, using materials, procedures and equipment of the type required for the Work.
  - 2. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone re-certification.
- D. Testing Agency Qualifications: An independent agency qualified according to ASTM E329 and Section 01 45 33 for testing indicated.
- E. Installer Training: Prior to beginning the work, manufacturer or manufacturer's representative shall provide on-site training for all contractor's personnel who will be installing anchors.

## PART 2 PRODUCTS

### 2.01 REGULATORY REQUIREMENTS

- A. Conform to applicable requirements of California Building Code (CBC), Title 24, Part 2, as amended and adopted by authorities having jurisdiction.
  - 1. Comply with Title 24, Part 9, California Fire Code Chapter 35 "Welding and Other Hot Work."

### 2.02 MATERIALS - STEEL

- A. Steel Sections: ASTM A36/A36M, for channels, angles and plates.
- B. Steel Tubing: ASTM A500/A500M Grade B cold-formed structural tubing.
- C. Mechanical Fasteners: Same material as or compatible with materials being fastened; type consistent with design and specified quality level.
- D. Bolts, Nuts, and Washers: As indicated on Drawings.
- E. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.
- F. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.
  - 1. Comply with SSPC-PA 1. Coordinate with requirements specified in Section 09 91 13 - Exterior Painting and 09 91 23 - Interior Painting .
    - a. Coordinate primer with finish paint and coating, as applicable, to provide sound foundation for field-applied topcoats despite prolonged exposure during construction.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 2
--	--	------------------------------------

- G. Galvanize all exterior steel members to comply with ASTM A123/A123M. Provide minimum 1.7 oz/sq ft galvanized coating.
- H. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

## 2.03 FABRICATION

- A. Ferrous Metal Surfaces, General:
  - 1. For metal fabrications exposed to view upon completion of the Work: Provide ferrous metals materials selected for their surface flatness, smoothness, and freedom from surface blemishes.
  - 2. Do not use materials whose exposed surfaces exhibit pitting, seam marks, roller marks, rolled trade names, roughness, and, for steel sheet, variations in flatness exceeding those permitted by reference standards for stretcher-leveled sheet.
- B. Hot-dip galvanize fabricated ferrous items, indicated as remaining unpainted, after fabrication. Field connections shall be bolted or screwed where possible. Avoid field cutting and welding which damage galvanized coating.
- C. Fit and shop assemble items in largest practical sections, for delivery to site.
- D. Fabricate items with joints tightly fitted and secured.
- E. Gas cutting of non-structural steel items may be acceptable where stress is not transmitted through flame-cut surfaces.
  - 1. Make cuts clean and to contour.
  - 2. Deduct 1/8 inch from effective width of members cut by torch.
- F. Continuously seal joined members by intermittent welds and plastic filler.
- G. Joints Exposed to Weather or Water: Fabricate to keep water out, or provide adequate drainage of water that penetrates.
- H. Steel Tubing and Piping Fabrication: Unless otherwise indicated, close ends with plate stock so no exposed ends of tubing and piping. Grind all edges.
- I. Connections, General:
  - 1. Component parts of built-up members shall be well-pinned with closely-fitted contact.
  - 2. Conceal connections where possible.
  - 3. Otherwise, make countersinks for concealment after fabrication, except where noted.
- J. Welding: Conform to AWS D1.1/D1.1M recommendations.
  - 1. Do not field weld galvanized components to remain unfinished.
  - 2. Provide continuous welds at welded corners and seams.
  - 3. Grind exposed welds smooth and flush with base material.
  - 4. Re-weld to fill holes. Putties and fillers are not acceptable.
- K. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 3
--	--	------------------------------------



- L. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.
  - 1. Bolted and Screwed Connections:
    - a. Provide holes and connections for work specified in other Sections.
    - b. Use bolts for field connections only.
    - c. Provide washers under heads and nuts bearing on wood.
    - d. Draw all nuts tight and nick threads of permanent connections.
    - e. Use beveled washers where bearing is on sloped surfaces.
    - f. Where screws must be used for permanent connections in ferrous metal, use flat head type, countersunk, with screw slots filled and finished smooth and flush.
- M. Furnish components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

## **2.04 FABRICATED ITEMS**

- A. Rough Hardware
  - 1. Provide bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes as indicated on Drawings.
- B. Other Products and Fabrications
  - 1. Other Products and Fabrications: Provide all materials not specifically described but required for a complete and proper installation, as selected by the Contractor, subject to review and acceptance by Construction Manager and Architect.

## **2.05 FINISHES - STEEL**

- A. Galvanizing of Structural Steel Members: Galvanize all exterior steel members after fabrication to ASTM A123/A123M requirements. Provide minimum 1.7 oz/sq ft galvanized coating.
- B. Galvanizing of Non-structural Items: Galvanize all exterior steel members after fabrication to ASTM A123/A123M requirements.

## **2.06 FABRICATION TOLERANCES**

- A. Squareness: 1/8 inch maximum difference in diagonal measurements.
- B. Maximum Offset Between Faces: 1/16 inch.
- C. Maximum Misalignment of Adjacent Members: 1/16 inch.
- D. Maximum Bow: 1/8 inch in 48 inches.
- E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that field conditions are acceptable and are ready to receive work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 4
--	--	------------------------------------

- B. Field Inspection of Fabricated Products: Prior to installation, inspect products for damage and verify markings and dimensions against reviewed submittals.
- C. Environmental Conditions: Do not install products intended for interior locations when spaces are uncovered and unprotected from inclement weather.
- D. Coordination: Coordinate metal fabrications Work with Work specified in other Sections so that related Work shall be accurately and properly joined.

### **3.02 PREPARATION**

- A. Clean and strip primed steel items to bare metal where site welding is required.
- B. Supply setting templates to the appropriate entities for steel items required to be cast into concrete.
- C. Make provision for erection loads with temporary bracing. Keep work in alignment.
- D. Obtain Architect's review prior to site cutting or making adjustments not indicated on Drawings and reviewed shop drawings.

### **3.03 INSTALLATION**

- A. Install items plumb and level, accurately fitted, free from distortion or defects.
- B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.
- C. Field weld components as indicated on drawings.
- D. Perform field welding in accordance with AWS D1.1/D1.1M.
- E. Obtain approval prior to site cutting or making adjustments not scheduled.

### **3.04 TOLERANCES**

- A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.
- B. Maximum Offset From True Alignment: 1/4 inch.
- C. Maximum Out-of-Position: 1/4 inch.

### **3.05 FIELD QUALITY CONTROL**

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 45 33 - Code-Required Special Inspections.
- B. Inspection: Special inspection of post-installed anchors shall be provided as required by the ICC-ES report for that anchor and not less than the requirements of the Structural Drawings and the following (whichever is the most restrictive):
  - 1. Continuously observe the installation of all anchors, or as specified in the ICC report.
    - a. Minimum anchor embedments, proof loads and torques shall be as shown on the Drawings.
    - b. Load Testing: Per Structural General Notes on Drawings.
    - c. Verify anchor type, anchor dimensions, hole dimensions, anchor spacing, edge distances, anchor embedment and adherence to the manufacturer's published installation instructions.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 5
--	--	------------------------------------

- d. For adhesive anchors also verify hole cleaning technique, adhesive expiration date and proper mixing and dispensing.
- 2. Subsequent inspection of installation will be required when there is a change of personnel doing the installation. Change is defined as any one or more persons drilling or preparing holes, or installing anchors.
- 3. Visually inspect 100% of all installed anchors.
- C. Reporting:
  - 1. Daily reports shall reference the applicable ICC-ES report number, indicate that all specified criteria were complied with and provide itemized verification of all inspected items.
  - 2. Special Inspector shall immediately report any deviations from the requirements to the Architect.
- D. Defective Work:
  - 1. Installations that are not accepted by the Special Inspector shall be considered defective.
  - 2. Provide additional testing and inspection to determine acceptability of defective work, as directed by the Architect at Contractor's expense.

### **3.06 REPAIR OF DEFECTIVE WORK**

- A. Remove and replace misplaced, defective or malfunctioning anchors at Contractor's expense. Replacement of anchors requires signed structural detail, unless otherwise noted.
- B. Fill empty anchor holes and patch failed anchor locations with high-strength, non-shrink non-metallic grout.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Metal Fabrications 05 50 00 - 6
--	--	------------------------------------

**SECTION 13 31 33**  
**PRE-ENGINEERED FABRIC SHADE STRUCTURES**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. Work included: A single, licensed shade structure contractor shall be responsible for the complete design, engineering, fabrication, supply and installation of the work specified herein.

**1.02 RELATED SECTIONS**

- A. Section 03 30 00 - Cast-in-Place Concrete: Footings.  
B. Section 31 23 16 - Excavation: Foundation excavation.

**1.03 REFERENCE STANDARDS**

- A. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures.  
B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.  
C. ASTM A135/A135M - Standard Specification for Electric-Resistance-Welded Steel Pipe.  
D. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.  
E. ASTM A603 - Standard Specification for Metallic-Coated Steel Structural Wire Rope.  
F. ASTM A992/A992M - Standard Specification for Structural Steel Shapes.  
G. ASTM F593 - Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.  
H. AWS D1.1/D1.1M - Structural Welding Code - Steel.  
I. IAS AC172 - Accreditation Criteria for Fabricator Inspection Programs for Structural Steel AC172.  
J. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

**1.04 SUBMITTALS**

- A. Product Data:
1. Provide data in the form of manufacturing technical data and specifications.
  2. Provide a list of at least 5 similar reference projects that have been installed within a maximum of 8 years. At least 3 of these projects shall have utilized the same membrane Fabric.
  3. Shop Drawings:
    - a. Provide minimum 11x17 copy. showing the following:
      - 1) Overall site plan with dimensioned location(s) of shade structure.
      - 2) Foundation plan for each shade structure.
      - 3) Plans and elevations of shade structure with dimensions and material callouts.
      - 4) Details of attachments.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 1
--	--	---

4. Provide written Welding Procedures for any shop or field welding.
5. Samples:
  - a. Provide fabric samples of a minimum of 7 color options of approved fabric.
  - b. Provide powder coat color selections for steel.
6. Certifications:
  - a. Provide a letter of authorization from fabric manufacture for use of fabric for the fabric specified in this section.
  - b. Proof of IAS (International Accreditation Service) certification.
  - c. The Tensioned Fabric Structure fabricator shall provide proof of an ongoing written Quality Assurance program for 5 years or more.

#### **1.05 QUALITY ASSURANCE**

- A. Special inspection requirements by a DSA approved independent inspection agency shall follow and meet the T & I list as approved by DSA. The shop fabrication shall include welding of all steel members and identification of steel and fabric material through mill certification or material testing. Uncertified steel shall be tested to the requirements of CBC.
- B. All bidders to have a DSA pre-approved PC number for structural drawings for sizes referenced in this bid at the time of bid.
- C. All bidders shall have at least 5 years experience in the design, engineering, manufacture, and installation of similar scope with a successful construction record of in-service performance as well as a minimum of 8 years experience in the specific manufacture and installation of Division of the State Architect approved structures and provide written proof of all items per Part 1 Article Submittals.
  1. The manufacturer shall be a Division of the State Architect approved vendor.
- D. Fabricator's Qualification Statement: Provide documentation showing steel fabricator is accredited under IAS AC172.
- E. Welders Certificates: Certify welders employed on the Work, verifying AWS qualification within the previous 12 months.
- F. Designer Qualifications: Perform design under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in California.

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products to project site in unopened packaging until ready for installation.
- B. Store components under a dry covered area and elevated above grade.
- C. Do not allow materials to become wet, stained, or dirty
- D. Handling:
  1. Handle materials to protect materials, coatings, and finishes during transportation and installation to prevent damage or staining.
  2. Handle fabric in accordance with manufacturer's instructions.
  3. Use care in handling of fabric to avoid damage to fabric material and coating.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 2
--	--	---

- 4. Do not damage, crush, or kink cables where occurs.
- E. All cables and end fittings shall be delivered clean and dry.

#### **1.07 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a one year period after Date of Substantial Completion.
- C. Provide twenty year manufacturer warranty for all upright posts, cables, and tensioning plates against failure due to rust-through corrosion.
- D. Provide ten year manufacturer warranty for fabric and stitching thread against degradation, cracking or material breakdown resulting from ultra-violet exposure.
  - 1. Exclusion: Failure of fabric due to chemical erosion or as a result of flying objects.
- E. Provide one year manufacturer warranty for powder-coating, or any other product or part not covered by one of the above warranties.

### **PART 2 - PRODUCTS**

#### **2.01 BASIS OF DESIGN MANUFACTURER**

- A. Basis of Design Product: DSA PC 04-119455, Full Cantilever Hip Single, Model DSA2022030-19 as manufactured by USA Shade & Fabric Structures, Inc., or approved equal.

#### **2.02 MANUFACTURERS**

- A. USA Shade & Fabric Structures, Inc: [www.usashade.com](http://www.usashade.com).
  - 1. Local representative: 50 Kalmus Drive, Costa Mesa CA Attn: Patti Abrecht, 949.466.4592 cell or 714.427.6981 office.
- B. Shade Systems, Inc. : [www.shadesystemsinc.com](http://www.shadesystemsinc.com).
- C. Substitutions: See Section 01 60 00 - Product Requirements.

#### **2.03 PERFORMANCE REQUIREMENTS**

- A. Engineer structures to meet or exceed the requirements of the ASCE 7 and California Building Code (CBC), with the following criteria:
  - Occupancy E
  - Exposure Level C
  - Design Loads Per ASCE 7.
- B. Division of the State Architect Approved Bid Scope:
  - 1. Building Codes: Proposed structure is approved as part of the overall A-Number for this project.
    - a. Approved structure contains proprietary information of the manufacturer. Selected sheets of Drawings have not been released for bid and will be made available to the successful bidders after Notice to Proceed.
    - b. Alternate products are required to follow Design-Build Scope as noted below and substitutions procedure: See Section 01 60 00 - Product Requirements.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 3
--	--	---

- C. Design Build Scope:
1. Building Codes: Proposed structure shall be Division of the State Architect approved and conform to the CBC using a minimum wind load based on 90 mph, 3 second gusts, exposure C, and a seismic (earthquake) load based on Zone 4. All shade structures shall be engineered with a zero wind pass through on the fabric.
    - a. Contractor is responsible for submittal through the Architect and approval by Division of the State Architect.
  2. Foundation designs shall be based on CBC , table 1804A.2, soil type 5 (1500 lbs/psf)
  3. Concrete shall be tested per Section 01 45 33 - Code-Required Special Inspections, CBC section 1903A and inspected per CBC section 1704A.4.

## 2.04 SYSTEM DESCRIPTION

- A. A pre-engineered steel tubular framed fabric structure in the size indicated on the Drawings.
- B. Standard Footings:
1. Provide footings per stringent California building codes for the specific structure. Columns will be provided as standard direct embedment or optional pier mount (anchoring hardware not supplied by Shade Systems).
- C. All tubing shall be pre-cut to appropriate lengths, and where applicable all outside surfaces shall be galvanized, with an interior corrosion-resistant zinc-rich coating.
- D. Roofing:
1. Sails are designed by manufacturer for use with polyethylene shade fabric.
  2. Fabric is attached to posts using the fastening systems below in conjunction with vinyl covered minimum ¼" diameter stainless steel cables.
  3. Cable fasteners are zinc-plated copper.
- E. Fastening System:
1. Deliver fabric complete with independent cables pre-inserted in fabric hems.
  2. Each cable shall be looped and clamped at each end.
  3. Fastening System to consist of a fastening device factory installed at each roof rafter corner.
    - a. Concealed attachment hook and sleeve at each rafter corner to move along a track in the rafter.
    - b. Cables are attached to hook which is welded to the moving sleeve, thereby distributing tension evenly over rafters and not directly onto the mechanism.
  4. Seal rafters with no penetrations on the top side, thereby preventing water from entering.
  5. Provide a moving sleeve with hook to allow the looped ends of each cable to slide over the hook when the sleeve is at its upper position.
    - a. Then by turning the concealed fastener within the rafter, moves the sleeve with hook outward (toward end of the rafter), thereby tensioning the cables and securing the fabric at the proper tautness.

Grossmont Union High School District		Pre-Engineered Fabric Shade
<b>Childcare Center Shade Structure</b>		Structures
RCA Project No. 1-30-65		13 31 33 - 4

6. Secure a locking cap at the end of each rafter with a vandal-resistant bolt.
7. Continuous one-piece cables, cables which are not independent per side and pre-looped and clamped at the factory, and/or cables which must be tensioned with the use of turnbuckles or tools not provided by the manufacturer (other than a common deep socket) are not acceptable.
8. Structures which do not feature the Fastening System on each and every rafter, or fastening mechanisms which do not feature a sealed top rafter and moving outer sleeve such as the Turn-N-Slide, are not acceptable

## 2.05 MATERIALS

### A. Shade Fabric:

1. Openness Factor: 64%.
2. Knitted of monofilament and tape construction high density polyethylene with Ultra Violet (U.V.) stabilizers and flame retardant. UV-Block Factor varies by standard color offered from 91% to 99%.
 

Nominal Thickness	0.057 inches
Fabric Mass	Min. 340 g/m <sup>2</sup>
Light Fastness	7-8 (Blue Wool Scale)
Weather Fastness	4-5 (Grey Scale Test)
Tear Resistance	Warp 210N Weft 276N
Breaking Force	Warp 786N Weft 2494N
Bursting Pressure	Mean 3500kPa
Bursting Force	Mean 2146N
3. All hems and seams are double row lock stitched using exterior grade UV-stabilized polyethylene GORE™ TENARA® sewing thread (GORE and TENARA are trademarks of W. L. Gore & Associates).
4. Flammability: Treat with fire retardants.
  - a. Comply with NFPA 701 Test Method 2 test standards for flammability, including the accelerated water leaching protocol.

### B. Steel Sections: Steel plates, bars, angles, and channels; ASTM A36/A36M.

1. Galvanized Steel: Structural shapes, plates and bars: From fully killed or semi-killed steel, ASTM A992/A992M, except silicon content in the range 0 to 0.4 percent or 0.15 to 0.25 percent, as applicable, only.

### C. Steel Tubing: ASTM A500/A500M Grade B cold-formed structural tubing and ASTM A135/A135M steel pipe.

1. Minimum yield strength: 40,000 psi with a minimum tensile strength of 45,000 psi on all posts.
2. Support Pipes, Where Required: Schedule 40 hot-dip galvanized or powder-coated black steel.

### D. Bolts, Nuts, and Washers: ASTM F593 stainless steel.

### E. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

Grossmont Union High School District		Pre-Engineered Fabric Shade
<b>Childcare Center Shade Structure</b>		Structures
RCA Project No. 1-30-65		13 31 33 - 5



- F. Finish: Powder Coated.
- G. Color: As selected by Architect from the manufacturer's standard range.
- H. Poured-in-place footings and piers:
  - 1. Concrete : Minimum 4,500 psi per Section 03 30 00 - Cast-in-Place Concrete.
  - 2. Reinforcing Steel: Minimum 60,000 psi as specified in Section 03 30 00 - Cast-in-Place Concrete.
- I. Cables and Fittings
  - 1. Tension Cable: Steel cable is determined based on calculated engineering load.
    - a. The design load is the load in the cable under a pre-stressed load condition per the recommendation of the engineer of record.
    - b. For light and medium loads; ¼" (nominal) galvanized 7x19 strand cable to be used and tensioned to minimum of 250 lbs
    - c. For heavy loads; 3/8" (nominal) galvanized 7 x 19 cable to be used and tensioned to minimum of 250 lbs.
  - 2. Galvanized Cables and Fittings:
    - a. Provide all structural wire rope made from Wire Rope conforming to AISI Steel Cable Manual requirements with a Class A galvanized coating or approved substitute. The cable should be IWRC improved plow steel. All cable terminations and connectors shall be hot-dipped galvanized for corrosion protection.
      - 1) Cables should be designed with a minimum safety factor of 5 on breaking strength.
    - b. Prestretch cables which are designated to be prestretched per ASTM A603 for wire rope. Cables of the same type shall have the same modulus of elasticity.
    - c. Design all swaged and speltered fittings, and attached to develop the full breaking strength of the cable. Thimble end fittings shall develop a minimum of 110% of the cable breaking strength.
    - d. Swaged End Fittings, Pins, Nuts and Washers: Electro-galvanized.
    - e. Speltered End Fittings: Hot dipped galvanized.
    - f. Attach a tag indicating the cable length and mark number to each cable assembly.
    - g. Tension cables to double the design load (indicated on Drawings) before length is cut.
    - h. Tension cables to the design load (indicated on Drawings) when measuring the cut length indicated on the shop drawings.
  - 3. Stainless Steel Cables and Fittings:
    - a. Cables: 1x19 Stainless Steel Open Strands, Grade 316.
    - b. Fabricate cables and fittings per the standard operating procedures of the manufacturers.
    - c. Attach a tag indicating the cable length and mark number to each cable assembly.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 6
--	--	---

- d. Tension cables to double the design load (indicated on Drawings) before length is cut.
- e. Tension cables to the design load (indicated on Drawings) when measuring the cut length indicated on the shop drawings.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Field Measurements: Verify layout information for shade structures shown on the Drawings in relation to the property survey and existing structures, and verify locations by field measurements prior to construction.
- B. Correct unsatisfactory conditions before proceeding with installation.

### **3.02 PREPARATION**

- A. Installation of shade structures shall be performed by manufacturer certified installers experienced in tension fabric structures. Perform installation in strict accordance with manufactures instructions for assembly, installation, and erection per approved drawings.
- B. Manufacturer is to prepare and provide a full and comprehensive assembly procedure guide prior to installation.

### **3.03 ERECTION**

- A. Weather Conditions:
  - 1. Proceed with installation of the fabric and associated work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturers recommendations.
  - 2. Do not install Tensioned Fabric Structures when wind conditions are deemed in excess of manufacturer's determination of safe wind speed erection conditions.
  - 3. It is the manufacturer's sole discretion to determine acceptable and safe wind condition for installation.
- B. Framing and structural members:
  - 1. Accurately set anchor bolts.
  - 2. Provide uniform bearing under base plates using non shrink grouting compound where applicable.
  - 3. Accurately set members to assure proper fitting and covering.
  - 4. As erection progresses, securely fasten the work to resist the dead load, wind, and erection stresses.
  - 5. Adequately guy and secure the Erected structural frame work to resist all possible loads due to wind and the installation process.
- C. Fabric:
  - 1. Prior to start of installation; check all surfaces of framing members and other rigid construction elements to be in contact with fabric to ensure that all edges are smooth

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 7
--	--	---

and well rounded.

2. Remove any potential causes for snagging or tearing of the fabric.
  3. Properly install all connections and provide all materials and equipment required for the erection and stressing of the fabric.
  4. Unroll the fabric in such a manner as to avoid snagging or dragging the fabric over sharp objects during installation.
  5. Confirm fabric is adequately prestressed by the fabric structure manufacturer and the appearance of the fabric membrane roof is smooth and wrinkle free.
  6. Avoid creasing or folding the fabric around sharp corners at all times.
- D. Fabric tensioning system:
1. Cables: Free of all kinks and bends.
  2. Take care not to damage the cables during installation. Bolt holes shall be 1/16" larger than the bolt, unless otherwise indicated.
  3. Size bolt holes 1/16 inch larger than the bolt, unless otherwise indicated.

#### **3.04 FIELD QUALITY CONTROL**

- A. Restore marred or abraded surfaces to original condition using same paint or coating as factory-applied finishes, when the results are acceptable to the Architect, otherwise replace damaged item.

#### **END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Pre-Engineered Fabric Shade Structures 13 31 33 - 8
--	--	---

## **SECTION 31 23 16 EXCAVATION**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Excavating for footings and site structures.
- B. Temporary excavation support and protection systems.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 01 40 00 - Quality Requirements: Inspection of bearing surfaces.
- B. Section 01 50 00 - Temporary Facilities and Controls: Dewatering excavations and water control.
- C. Section 01 70 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring. General requirements for dewatering of excavations and water control.
- D. Section 31 23 23 - Fill: Fill materials, backfilling, and compacting.

#### **1.03 REFERENCE STANDARDS**

- A. 29 CFR 1926 - Safety and Health Regulations for Construction.

#### **1.04 REFERENCE STANDARDS**

#### **1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Temporary Support and Excavation Protection Plan.
- C. Project Record Documents: Record drawings at project closeout according to 01 70 00 - Execution and Closeout Requirements. Show locations of installed support materials left in place, including referenced locations and depths, on drawings.
- D. Field Quality Control Submittals: Document visual inspection of load-bearing excavated surfaces.

#### **1.06 QUALITY ASSURANCE**

- A. Temporary Support and Excavation Protection Plan:
  - 1. Indicate sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property.
  - 2. Include drawings and calculations for bracing and shoring.
  - 3. Bracing and shoring design to meet requirements of OSHA's Excavation Standard, 29 CFR 1926, Subpart P.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Excavation 31 23 16 - 1
--	--	----------------------------

- B. Designer Qualifications: For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in California.
- C. Shoring Installer Qualifications: Company specializing in performing the shoring and bracing work of this section with minimum five years of documented experience.

#### **1.07 COORDINATION OF SPECIFICATION REQUIREMENTS**

- A. Coordinate these Specification Section requirements with specifications included on Drawings. Comply with more stringent requirements and with those requirements of authorities having jurisdiction.

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

- A. Bedding and Fill to Correct Over-Excavation:
  - 1. See Section 31 23 23 for bedding and corrective fill materials at general excavations.

### **PART 3 EXECUTION**

#### **3.01 DIG ALERT NOTIFICATION**

- A. Before any excavation in or near the public right-of-way, contact the Underground Service Alert of Southern California (Dig Alert) at 811 for information on buried utilities and pipelines.
- B. Delineation of the proposed excavation site is mandatory. Mark the area to be excavated with water soluble or chalk based white paint on paved surfaces or with other suitable markings such as flags or stakes on unpaved areas.
- C. Call at least Two (2) full working days prior to digging.
- D. If the members (utility companies) have facilities within the work area, they will mark them prior to the start of your excavation and if not, they will let you know there is no conflict. A different color is used for each utility type (electricity is marked in red, gas in yellow, water in blue, sewer in green, telephone and cable TV in orange).
- E. The Law requires to hand expose to the point of no conflict 24 inches on either side of the underground facility, to know its exact location before using power equipment.
- F. If caught digging without a Dig Alert ticket fines can be as much as \$50,000 per California government code 4216.

#### **3.02 EXAMINATION**

- A. Verify that survey bench mark and intended elevations for the work are as indicated.
- B. Survey existing adjacent structures and improvements and establish exact elevations at fixed points to act as benchmarks.
  - 1. Resurvey benchmarks during installation of excavation support and protection systems and notify District if any changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Excavation 31 23 16 - 2
--	--	----------------------------

- C. Determine the prevailing groundwater level prior to excavation. If the proposed excavation extends less than 1 foot into the prevailing groundwater, control groundwater intrusion with perimeter drains routed to sump pumps, or as directed by Architect. If the proposed excavation extends more than 1 foot into the prevailing groundwater, control groundwater intrusion with a comprehensive dewatering procedures, or as directed by Geotechnical Engineer.

### 3.03 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Locate, identify, and protect utilities that remain and protect from damage.
- C. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- D. Grade top perimeter of excavation to prevent surface water from draining into excavation. Provide temporary means and methods, as required, to maintain surface water diversion until no longer needed, or as directed by Architect.
- E. See Sections 01 70 00 and 02 41 00 for underpinning and shoring of adjacent structures that could be damaged by excavating work.

### 3.04 TEMPORARY EXCAVATION SUPPORT AND PROTECTION

- A. Excavation Safety: Comply with OSHA's Excavation Standard, 29 CFR 1926, Subpart P.
  - 1. Excavations in stable rock or in less than 5 feet in depth in ground judged as having no cave-in potential do not require excavation support and protection systems.
  - 2. Depending upon excavation depth, time that excavation is open, soil classification, configuration and slope of excavation sidewalls, design and provide an excavation support and protection system that meets the requirements of 29 CFR 1926, Subpart P:
    - a. Sloping and benching systems.
    - b. Support systems, shield systems, and other protective systems.
- B. Shoring Design: Comply with State of California Trenching and Shoring Manual issued by Offices of Structure Construction; 2011.
  - 1. Provide all materials and services necessary to properly engineer and construct shoring for excavations. Selection of materials and design of shoring, underpinning and bracing of new and existing structures shall be solely the responsibility of the Contractor.
- C. Underpin adjacent structures that could be damaged by excavating work, including utilities and pipe chases.
- D. Protect excavations from cave-in and from loose soil and other matter from falling in.
- E. Leave excavation support and protection systems, used as formwork or within 10 feet of existing foundations, permanently in place, unless otherwise noted.
  - 1. Cut off top 4 feet below grade, abandon remainder.
- F. Excavation support and protection systems not required to remain in place may be removed subject to approval of District or District's Representative.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Excavation 31 23 16 - 3
--	--	----------------------------

1. Remove temporary shoring and bracing in a manner to avoid harmful disturbance to underlying soils and damage to buildings, structures, pavements, facilities and utilities.

### **3.05 EXCAVATING**

- A. Excavate to accommodate new structures and paving/site structures.
  1. Excavate to the specified elevations.
  2. Excavate to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work.
  3. Cut utility trenches wide enough to allow inspection of installed utilities.
  4. Hand trim excavations. Remove loose matter.
  5. Excavate subsoil from areas to be filled with structural fill, to construct foundations, footings, slabs on grade, paving and to achieve final finish grades.
  6. Over-excavate to working elevations for backfilling and compaction operations.
- B. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored, per CalOSHA requirements for Type C Soil.
  1. Machine slope banks of excavations to minimum 1 to 1 ratio horizontal to vertical or angle of repose, if less, until shored.
    - a. Exception: If authorized in writing by Geotechnical Engineer.
    - b. Slope must comply with local codes, ordinances and requirements of agencies having jurisdiction.
- D. Do not interfere with 45 degree influence line of bearing splay of foundations.
  1. Avoid interference at footings by providing additional width, depth, and other provisions.
- E. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- F. Provide temporary means and methods, as required, to remove all water from excavations until directed by Architect. Remove and replace soils deemed suitable by classification and which are excessively moist due to lack of dewatering or surface water control.

### **3.06 SUBGRADE PREPARATION**

- A. See Section 31 23 23 for subgrade preparation at general excavations.

### **3.07 FILLING AND BACKFILLING**

- A. Do not fill or backfill until all debris, water, unsatisfactory soil materials, obstructions, and deleterious materials have been removed from excavation.
- B. See Section 31 23 23 for fill, backfill, and compaction requirements at general excavations.

### **3.08 REPAIR**

- A. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 31 23 23 at no additional cost.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Excavation 31 23 16 - 4
--	--	----------------------------

### **3.09 FIELD QUALITY CONTROL**

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.
- B. Provide for visual inspection of load-bearing excavated surfaces by Architect and geotechnical consultant before placement of foundations.

### **3.10 CLEANING**

- A. Remove excavated material that is unsuitable for re-use from site.
- B. Remove excess excavated material from site.

### **3.11 PROTECTION**

- A. Divert surface flow from rains or water discharges from the excavation.
- B. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- C. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain foundation subgrade in satisfactory, undisturbed condition.
- D. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- E. Keep excavations free of standing water and completely free of water during concrete placement.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Excavation 31 23 16 - 5
--	--	----------------------------



## **SECTION 31 23 23**

### **FILL**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Filling, backfilling, and compacting for footings.
- B. Filling holes, pits, and excavations generated as a result of removal (demolition) operations.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 31 23 16 - Excavation: Removal and handling of soil to be re-used.

##### **1.03 DEFINITIONS**

- A. Finish Grade Elevations: Indicated on drawings.
- B. Subgrade Elevations: Indicated on drawings.

##### **1.04 REFERENCE STANDARDS**

- A. ASTM D4829 - Standard Test Method for Expansion Index of Soils.
- B. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
- C. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- D. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- E. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
- F. DTSC-Clean Fill - California Department of Toxic Substances Control - Clean Imported Fill Material.

##### **1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Soil Samples: 10 pounds sample of each type of fill; submit in air-tight containers to testing laboratory.
  - 1. Submit samples directly to Geotechnical Engineer for testing and analysis copy transmittals to Architect and District.
- C. Materials Sources: Submit name of imported materials source.
- D. Fill Composition Test Reports: Results of laboratory tests on proposed and actual materials used, including manufactured fill.
- E. Compaction Density Test Reports.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 1
--	--	----------------------

- F. Manufacturer's Instructions.
- G. Manufacturer's Qualification Statement.
- H. Specimen Warranty.
- I. Provide proof that all imported materials conform to the requirements of DTSC-Clean Fill Imported Fill Materials for School Sites by proper documentation for the imported materials.

#### **1.06 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than ten years of documented experience.
- B. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.
- C. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document that prescribes execution requirements.

#### **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles where agreed to.
  - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
  - 2. Prevent contamination.
  - 3. Protect stockpiles from erosion and deterioration of materials.

#### **1.08 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

### **PART 2 PRODUCTS**

#### **2.01 FILL MATERIALS**

- A. General Fill: Subsoil excavated on-site.
  - 1. Graded.
  - 2. Free of lumps larger than 3 inches, rocks larger than 3 inches, and debris.
  - 3. Complying with ASTM D2487 Group Symbol CL.
- B. Structural Fill: Subsoil excavated on-site.
  - 1. Graded.
  - 2. Free of organic matter, debris, and oversize particles (e.g., cobbles, rubble, etc. that are larger than 3 inches, rocks larger than 3 inches. Fill shall contain at least fifty percent of material smaller than 1/4 inch in size.
  - 3. Imported fill materials: The soil shall be tested for potential contamination in accordance with DTSC-Clean Fill protocols. Submit to Geotechnical Engineer.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 2
--	--	----------------------

- a. Import sandy soil shall be free of organics, debris and oversize particles (e.g., cobbles, rubble, rocks, etc. that are greater than 3 inches in the largest dimension).
  - b. Additionally, import soils shall not have any corrosion impacts to buried concrete; and be non-expansive (Expansion Index less than 21 per ASTM D4829).
  - c. Prior to import, geotechnical consultant shall evaluate and test the import soils in order to confirm the quality of the material.
- 4. On-site soils should only be used as specified in the Soils Report.
- 5. Complying with ASTM D2487 Group Symbol CL.
- C. Concrete for Fill: See Section 03 30 00; compressive strength of 2,500 psi.
  - 1. Exception: Concrete used under footings and foundations to correct over-excavation shall be same as for footings and foundation.
- D. Granular Fill- Fill Type GM, GW: Coarse aggregate, conforming to Uniform Standard Specifications for Public Works Construction Off-Site Improvements standard.
- E. Granular Fill - Pea Gravel: Natural stone; washed, free of clay, shale, organic matter.
  - 1. Grade in accordance with ASTM D2487 Group Symbol GP.
- F. Topsoil: Topsoil excavated on-site.
  - 1. Unclassified.
    - a. The soil shall be tested for potential contamination in accordance with DTSC-Clean Fill protocols.
  - 2. Graded.
  - 3. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.
  - 4. Acidity range (pH) of 5.5 to 7.5.
  - 5. Containing a minimum of 4 percent and a maximum of 25 percent inorganic matter.
  - 6. Complying with ASTM D2487 Group Symbol OH.
  - 7. Limit decaying matter to 5 percent of total content by volume.
- G. Type F - Subsoil: Reused, free of rocks larger than 3 inch size, and debris.
  - 1. Existing fill and alluvium or older alluvium may be considered suitable for re-use as compacted fills provided the recommendations of the geotechnical report and observations of the geotechnical engineer are followed.

## 2.02 ACCESSORIES

- A. Geotextile Fabric: Non-biodegradable, non-woven; Geotex 801 manufactured by Propex Geotextile Systems, geotextile.com.

## 2.03 SOURCE QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for testing and analysis of soil material.
- B. Where fill materials are specified by reference to a specific standard, test and analyze samples for compliance before delivery to site.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 3
--	--	----------------------

- C. If tests indicate materials do not meet specified requirements, change material and retest.
- D. Provide materials of each type from same source throughout the Work.
- E. Comply with EPA/DTSC-Clean Fill requirements.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify structural or other backfill materials to be reused or imported are acceptable to the satisfaction of the Geotechnical Engineer. Approval shall be obtained in advance of re-use or importation onto the site.
  - 1. Test soil for potential contamination in accordance with DTSC-Clean Fill protocols.
  - 2. Provide imported fill materials compatible with on-site soils in addition to being suitable for its intended use with the following criterion, as allowed by the Geotechnical Engineer.
    - a. Predominantly granular in nature.
    - b. Containing no rocks larger than 3 inches maximum dimension.
    - c. Free of organic material (loss on ignition less-than 2 percent).
    - d. Very low expansion potential (with an Expansion Index less than 21).
    - e. Low corrosion impact to the proposed improvements.
- B. Verify that survey bench marks and intended elevations for the Work are as indicated.
- C. Identify required lines, levels, contours, and datum locations.
- D. Verify subdrainage, dampproofing, or waterproofing installation has been inspected.
- E. Verify structural ability of unsupported walls to support imposed loads by the fill.
- F. Verify areas to be filled are not compromised with surface or ground water.

### **3.02 PREPARATION**

- A. Scarify and proof roll subgrade surface to a depth of 8 inches to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with AWS D1.4/D1.4M Type II or concrete fill and compact to density equal to or greater than requirements for subsequent backfill material.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Prior to placement of aggregate base course material at paved areas, compact subsoil to 95 percent of its maximum dry density in accordance with ASTM D1557.
- E. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

### **3.03 FILLING**

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 4
--	--	----------------------

1. Place fill soils compacted in horizontal lifts to a relative compaction of 90 percent or more in general accordance with ASTM D1557.
  2. Lift thickness for fill soils will vary depending on the type of compaction equipment used but should generally be placed in horizontal lifts not exceeding 8 inches in loose thickness.
  3. Place fill soils at slightly above optimum moisture content as evaluated by ASTM D1557.
  4. Avoid damage to wet and dry utility lines when compacting fill and subgrade materials.
- C. Employ a placement method that does not disturb or damage other work.
1. Do not disturb or damage foundation perimeter drainage and foundation waterproofing and protective cover utilities in trenches.
- D. Systematically fill and compact per geotechnical report. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Granular Fill: Place and compact materials in equal continuous layers not exceeding 6 inches compacted depth.
- G. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth.
- H. Slope grade away from building minimum 2 inches in 10 feet, unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- I. Correct areas that are over-excavated.
1. Load-bearing foundation surfaces: Fill with concrete.
  2. Other areas: Use general fill, flush to required elevation, compacted to minimum 90 or 95 percent of maximum dry density in subgrade zone.
- J. Compaction Density Unless Otherwise Specified or Indicated:
1. Under paving and similar construction: 90 percent of maximum dry density.
  2. At upper 12 inches beneath vehicular pavements: 95 percent of maximum dry density.
  3. At other locations: At least 90 percent of maximum dry density.
- K. Reshape and re-compact fills subjected to vehicular traffic.
- L. Maintain temporary means and methods, as required, to remove all water while fill is being placed as required, or until directed by the Architect. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack of dewatering or surface water control.
- M. Remove surplus fill and backfill materials from site.

### **3.04 FILL AT SPECIFIC LOCATIONS**

- A. Use general fill unless otherwise specified or indicated.
- B. Structural Fill:
1. Use general fill.
  2. Fill up to subgrade elevations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 5
--	--	----------------------

3. Maximum depth per lift: 6 inches, compacted.
4. Compact to minimum at least 90 percent of maximum dry density.

### 3.05 TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.
- B. Top Surface of Filling Under Paved Areas: Plus or minus 1/2 inch from required elevations.

### 3.06 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.
  1. Laboratory Tests and Analyses: Where backfill is required to be compacted to a specified density, tests for compliance shall be made in accordance with requirements specified in Section 01 40 00 - Quality Requirements.
- B. Perform compaction density testing on compacted fill in accordance with ASTM D1556 or ASTM D6938.
  1. Field inspections and testing shall be performed and submitted in accordance with requirements specified in Section 01 40 00 - Quality Requirements.
  2. Allow testing service to inspect and approve each subgrade and fill layer before further fill, backfill or construction Work is performed.
  3. Alternate Density Test Method:
    - a. Field density tests may also be performed by the nuclear method in accordance with ASTM D6938, providing that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D1556/D1556M.
    - b. In conjunction with each density calibration check, check the calibration curves furnished with the moisture gages in accordance with ASTM D6938.
    - c. If field tests are performed using nuclear methods, make calibration checks of both density and moisture gages at beginning of Work, on each different type of material encountered, and at intervals as directed by Architect or District's testing and inspection agency.
- C. Evaluate results in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D 1557 ("modified Proctor") or AASHTO T 180.
- D. Non-compliance: If tests indicate work does not meet specified requirements, remove work, replace and retest.
  1. Should tests of fill or backfill indicate non-compliance with required density, Contractor shall over-excavate, recompact and retest until specified density is obtained.
  2. Costs and Time associated with remedial Work and retesting shall be in accordance with provisions of the General Conditions.
  3. Retesting to demonstrate compliance shall be by a testing laboratory acceptable to District and shall be at Contractor's expense.
- E. Frequency of Tests:
  1. Footing Subgrade Testing:

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 6
--	--	----------------------

- a. For each strata of soil on which footings will be placed, perform at least one in-place density test to verify required design bearing capacities.
    - b. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with related tested strata when acceptable to Geotechnical Engineer.
  - 2. Paved Areas Testing:
    - a. Perform at least one field density test of subgrade for every 2,000 sf of paved area or building slab, but in no case fewer than three tests.
    - b. In each compacted fill layer, perform one field density test for every 2,000 sf of overlaying building slab or paved area, but in no case fewer than three tests.
  - 3. Foundation Wall Backfill Testing: Perform at least two field density tests at locations and elevations as directed.
- F. Proof roll compacted fill at surfaces that will be under slabs-on-grade.

### 3.07 CLEANING

- A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

### END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Fill 31 23 23 - 7
--	--	----------------------

**SECTION 31 63 29**  
**DRILLED CONCRETE PIERS AND SHAFTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Machine drilled shaft.
- B. Concrete and reinforcement.
- C. Shaft liner, if required.

**1.02 RELATED REQUIREMENTS**

- A. Section 03 30 00 - Cast-in-Place Concrete: Requirements for concrete and reinforcement.

**1.03 DEFINITIONS**

- A. Pier Diameter: Diameter of drilling bucket or auger bit or inside diameter of casing.
- B. Pier Length: Total length of caisson from bottom of wall, grade beam or pier cap to bottom of hole as drilled.
- C. Center of Piers: Intersection of two diameters, one taken parallel to the wall, grade beam, or column line direction, the other taken perpendicular to the first diameter.
- D. The term caissons, piles and piers mentioned in reference to this project within the body of these documents shall always mean "drilled concrete piers and shafts"

**1.04 REFERENCE STANDARDS**

- A. ACI 336.1 - Specification for the Construction of Drilled Piers.

**1.05 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by all affected installers.

**1.06 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Installer's Qualification Statement.
- C. Project Record Documents: Record actual locations of piers, pier diameter, and pier length. Accurately record the following:
  - 1. Sizes, lengths, and locations of piers.
  - 2. Sequence of placement.
  - 3. Final base and top elevations.
  - 4. Deviation from indicated locations.
  - 5. Placement and configuration of reinforcement deviations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Drilled Concrete Piers and Shafts 31 63 29 - 1
--	--	---



## **1.07 QUALITY ASSURANCE**

- A. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years of documented experience.

## **PART 2 PRODUCTS**

### **2.01 MATERIALS**

- A. Concrete Materials and Mix: Specified in Section 03 30 00.
- B. Equipment: Appropriate for dewatering excavated shaft.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Use placement method which will not cause damage to nearby structures.
- B. Notify adjacent and affected land owners and building occupants with 90 days notice before proceeding with the work.
- C. Protect structures near the work from damage.
- D. Prepare to place piers from existing site elevations.
- E. Grade perimeter of pier and shaft area to prevent surface water from draining into soil borings. Provide temporary means and methods, as required, to maintain surface diversion until no longer needed, or as directed by the Architect.

### **3.02 INSTALLATION**

- A. Construct piers in accordance with ACI 336.1.
- B. Drill vertical pier shafts to diameters and depths indicated.
- C. Clean shaft and bottom of loose material. Provide temporary means and methods, as required, to remove all water from soil borings as needed, or until directed by the Geotechnical Engineer.
- D. Allow inspection of shaft and liner prior to placement of reinforcement and concrete.
- E. Place reinforcing steel in accordance with Section 03 30 00.
- F. Place concrete in single pour, in accordance with Section 03 30 00 with equipment designed for vertical placement of concrete.
- G. Coordinate casing withdrawal with concrete placement so that concrete pressure head exceeds anticipated outside soil and water pressure above bottom of casing at all times during withdrawal.
- H. Extend reinforcement for connection of caps.
- I. Set tops of piers to elevations indicated.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Drilled Concrete Piers and Shafts 31 63 29 - 2
--	--	---

### **3.03 TOLERANCES**

- A. Install piers with maximum variation from location, plumbness, bottom area, diameter, and anchorage locations as specified in ACI 336.1.
- B. Maximum Variation From Vertical: 1 in 48.
- C. Maximum Variation From Design Top Elevation: Plus 3 inches, minus 1 inch.
- D. Maximum Out-of-Position: 2 inches.

### **3.04 FIELD QUALITY CONTROL**

- A. Field inspection and testing will be performed under provisions of Section 01 40 00 - Quality Requirements.

### **3.05 UNACCEPTABLE PIERS**

- A. Unacceptable Piers: Piers placed out of position, are below elevations, or are damaged.
- B. Provide additional piers or replace piers failing to comply with specified requirements.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65		Drilled Concrete Piers and Shafts 31 63 29 - 3
--	--	---



# RUHNAU CLARKE ARCHITECTS

, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 439 8888



**Architect**  
Ruhnau Clarke Architects  
5751 Palmer Way, Suite C,  
Carlsbad, CA 92010  
Phone: 760.438.5899  
Contact: **Chris Perez**  
*cperez@ruhnaucclarke.com*

PRINT NAME	
<b>C-21340</b>	<b>10-31-23</b>
LICENSE NUMBER	EXPIRATION DATE

**RUHNAUCLARKE.COM**

3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

**GROSSMONT HIGH SCHOOL  
1100 MURRAY DR. EL CAJON, CA 92020  
GROSSMONT UNION HIGH SCHOOL DISTRICT**

# G-1



CODE ANALYSIS																						
BLDG. #	BUILDING NAME	BUILDING ANALYSIS								SEC. 508	AUTO. SPRINKLER SYSTEM	TABLE 601 & 602								TABLE 705.8	TOTAL OCCUPANTS	REMARKS
		OCC. TYPE	CONST. TYPE	STORY (ALLOW.)	STORY (ACTUAL)	BLDG. HT. (ALLOW.) TABLE 504.3	BLDG. HT. (ACTUAL)	BLDG. AREA (ALLOW.)	BLDG. AREA (ACTUAL)			FIRE RESISTIVE REQUIREMENTS FOR BUILDING ELEMENTS										
										SEPARATION BETWEEN OCCUPANCY			PRIMARY STRUCT. FRAME	BEARING WALLS		NON-BEARING WALLS		FLOOR CONST.	ROOF CONST.	MAXIMUM AREA OF EXTERIOR WALL OPENINGS		
														EXT.	INT.	EXT.	INT.					
900	(E) BLDG P (900)	E	V-B (COMBUSTIBLE)	2	1	55'-0"	20'-8"	9,500 SF	6,193 SF	T602 10c x +30 = 0 FOR E OCCUPANCY	YES, FULLY SPRINKLERED (NOT REQ'D)	0	0	0	0	0	0	0	-	113		
SS-1	(N) SHADE STRUCTURE	A-2	V-B (COMBUSTIBLE)	1	1	40'	14'-8"	5,500 SF	312.5 SF	N/A	NO	0	0	0	0	0	0	0	N/A	21		

## 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:	GROSSMONT UNION HIGH SCHOOL DISTRICT
Project Name/School:	GROSSMONT HIGH SCHOOL
Project Address:	1100 MURRAY DRIVE, EL CAJON 92020

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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
2. Was the fire hydrant water flow test performed as part of this LFA review?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Refer to the following website for FHSZ locations: <a href="http://gis.ca.gov/FHSZ/">http://gis.ca.gov/FHSZ/</a>	Moderate <input type="checkbox"/>	High <input type="checkbox"/> Very High <input type="checkbox"/>
Wildland Interface Area (WIPA) (If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)	WIPA <input type="checkbox"/>	

DGS DSA 810 (revised 12/20/20) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 1 of 4

### DSA 810 FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

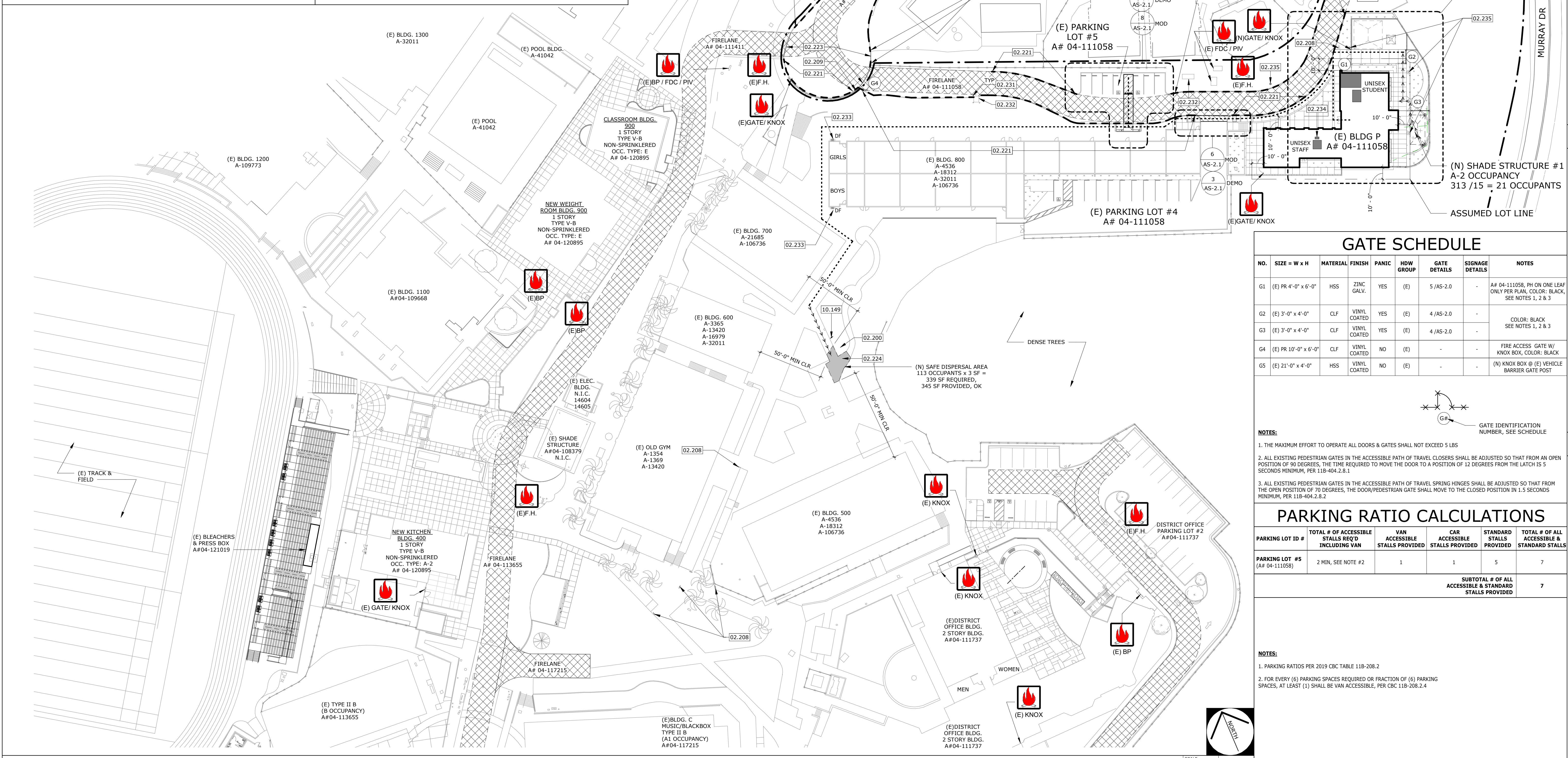
CONDITION MEANS AND METHODS RESOLUTION	ALTERNATE ACCEPTED			
	Yes	No	N/A	N/R
4. Emergency vehicle access roadways do not meet CFC requirements.				<input checked="" type="checkbox"/>
4a. <b>Acceptable Alternate:</b> Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.		<input checked="" type="checkbox"/>		
5. <b>Fire Hydrants:</b> Number and spacing does not meet CFC requirements.				<input checked="" type="checkbox"/>
5a. <b>Acceptable Alternate:</b> Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.		<input checked="" type="checkbox"/>		
6. <b>Fire Hydrants:</b> Water flow and pressure are less than CFC minimum.				
6a. <b>Acceptable Alternate:</b> The available flow and pressure is acceptable for providing fire suppression and protection of life and property.		<input checked="" type="checkbox"/>		
7. Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.				<input checked="" type="checkbox"/>
7a. <b>Acceptable Alternate:</b> The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.		<input checked="" type="checkbox"/>		

**School District Acceptance of Acceptable Design Alternates**  
By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name:	
LFA Review Official:	
Title:	Work Phone:
Work Email:	
LFA Reviewer's Signature:	Date:

DGS DSA 810 (revised 12/20/20) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 2 of 4



PROJECT No. : 8/29/2022 10:56:57 AM	
DRAWN BY:	CHECKED BY:
ISSUE No. : DATE : DESCRIPTION :	REVISION No. : DATE : DESCRIPTION :
ISSUE No. : DATE : DESCRIPTION :	REVISION No. : DATE : DESCRIPTION :
ISSUE No. : DATE : DESCRIPTION :	REVISION No. : DATE : DESCRIPTION :

RUHNAUCLARKE.COM

3775 TENTH STREET, RIVERSIDE CALIFORNIA 92505 (951) 684-4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438-5899

GATE SCHEDULE							
NO.	SIZE = W x H	MATERIAL	FINISH	PANIC	HOW GROUP	GATE DETAILS	SIGNAGE DETAILS
G1	(E) PR 4'-0" x 6'-0"	HSS	ZINC GALV.	YES	(E)	5 / AS-2.0	-
G2	(E) 3'-0" x 4'-0"	CLF	VINYL COATED	YES	(E)	4 / AS-2.0	-
G3	(E) 3'-0" x 4'-0"	CLF	VINYL COATED	YES	(E)	4 / AS-2.0	-
G4	(E) PR 10'-0" x 6'-0"	CLF	VINYL COATED	NO	(E)	-	-
G5	(E) 21'-0" x 4'-0"	HSS	VINYL COATED	NO	(E)	-	-
<b>NOTES:</b> 1. THE MAXIMUM EFFORT TO OPERATE ALL DOORS & GATES SHALL NOT EXCEED 5 LBS. 2. ALL EXISTING PEDESTRIAN GATES IN THE ACCESSIBLE PATH OF TRAVEL SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM, PER 118-404.2.8.1. 3. ALL EXISTING PEDESTRIAN GATES IN THE ACCESSIBLE PATH OF TRAVEL SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR/PEDESTRIAN GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM, PER 118-404.2.8.2.							

PARKING RATIO CALCULATIONS				
PARKING LOT ID #	TOTAL # OF ACCESSIBLE STALLS PROVIDED INCLUDING VAN	VAN ACCESSIBLE STALLS PROVIDED	CAR ACCESSIBLE STALLS PROVIDED	STANDARD STALLS PROVIDED
PARKING LOT #5 (A# 04-111058)	2 MIN. SEE NOTE #2	1	1	5
SUBTOTAL # OF ALL ACCESSIBLE & STANDARD STALLS PROVIDED				7
<b>NOTES:</b> 1. PARKING RATIOS PER 199 CBC TABLE 118-208.2 2. FOR EVERY (6) PARKING SPACES REQUIRED OR FRACTION OF (6) PARKING SPACES, AT LEAST (1) SHALL BE VAN ACCESSIBLE, PER CBC 118-208.2.4				

**OVERALL SP MOD** SCALE: 1" = 40'-0" 1

CHILD CARE CENTER SHADE STRUCTURE

GROSSMONT HIGH SCHOOL  
1100 MURRAY DR. EL CAJON, CA 92020  
GROSSMONT UNION HIGH SCHOOL DISTRICT



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 04-121137 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 08/31/2022

RUHNAU  
CLARKE  
ARCHITECTS

## GENERAL NOTES

- ALL FIRE HYDRANTS, FLOW RATES, AND CLEARANCES ARE EXISTING WILL REMAIN UNCHANGED.
- DURING CONSTRUCTION PROVIDE CLEAR FIRE ACCESS AT ALL TIMES.
- ALL STRUCTURES ARE IN COMPLIANCE WITH STATE OF CALIFORNIA FIRE CODE STANDARDS.
- ALL GATES ON P.O.T. MUST HAVE PANIC HARDWARE.

## KEYNOTES

02.200	EXISTING LANDSCAPE AREA
02.208	EXISTING ACCESSIBLE DIRECTIONAL SIGN, POLE MOUNTED, REFER TO DETAIL 21/AS-2.1
02.209	EXISTING TOW AWAY SIGN, FENCE MOUNTED, REFER TO DETAIL 18/AS-2.1
02.221	EXISTING 6" HIGH x 6" WIDE FIRE LANE RAISED CONCRETE CURB, PAINTED RED & WHITE LETTERS
02.223	EXISTING 0" CONCRETE CURB FACE
02.224	EXISTING CONCRETE PAVING, 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS
02.231	EXISTING BOLLARDS TO REMAIN
02.232	EXISTING EQUIPMENT TO REMAIN
02.233	EXISTING ACCESSIBLE DRINKING FOUNTAIN W/ RAILS, HI-LO
02.234	EXISTING ACCESSIBLE DRINKING FOUNTAIN ALCOVE, HI-LO
02.235	EXISTING LIGHT POLE TO REMAIN, PROTECT IN PLACE
10.149	SAFE DISPERSAL SIGN PER DETAIL 23/AS-2.1
28.161	INSTALL NEW KNOX BOX ON EXISTING GATE POST TO REMAIN, CLEAR OF GATE WHEN HOLDING IN OPEN POSITION

## P.O.T. LEGEND/NOTES

PROPERTY LINE

EXISTING PATH OF TRAVEL (P.O.T.) A# 04-111058

PROPOSED PATH OF TRAVEL (P.O.T.)


PATH OF TRAVEL (P.O.T.) AS INDICATED IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" REVEALED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM AND SMOOTH. CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED. (POT) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS HEATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECT TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT, AND PATH OF TRAVEL COMPLIES WITH CBC 11B-303 & 11B-304


DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1.) HAVE BEEN IDENTIFIED AND 2.) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.


DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCOMPLYING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.


OPENINGS IN GRATING OR STRAINERS LOCATED IN PEDESTRIAN CIRCULATION PATHS OR IN POT SHALL NOT ALLOW PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER. ELONGATED OPENINGS SHALL BE PLACED SO THAT LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL IN COMPLIANCE WITH SECTION 11B-302.3


## FIRE LANE LEGEND

 GATE/KNOX

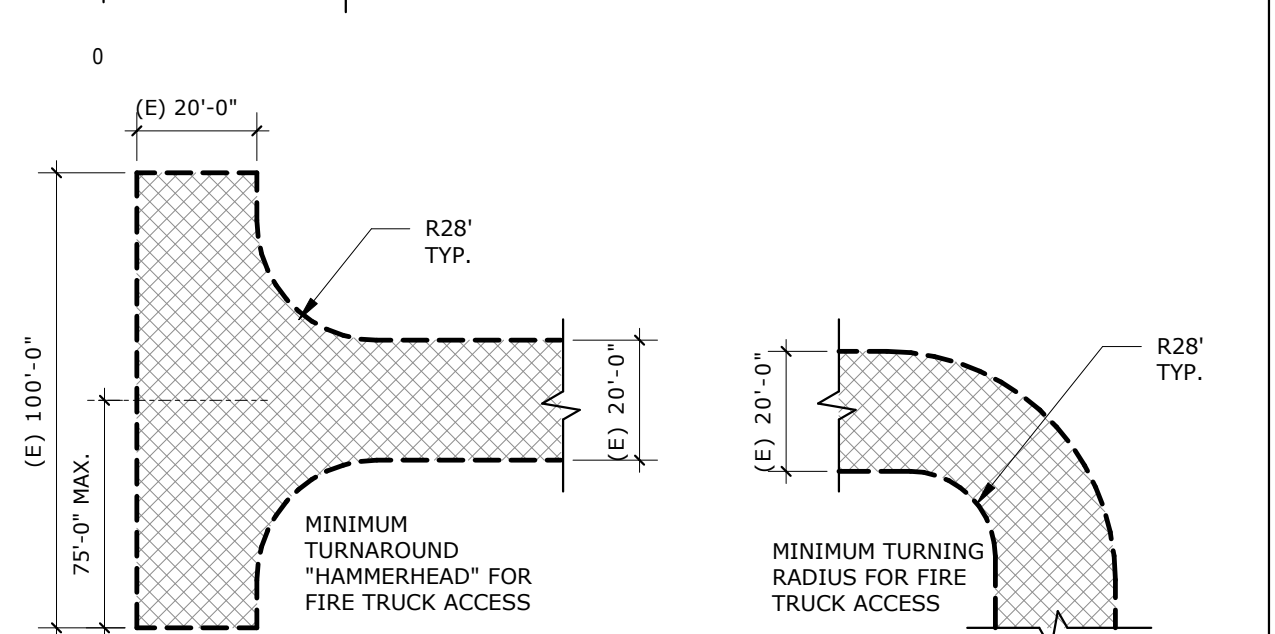
 FIRE HYDRANT EXISTING F.H. EXISTING FIRE HYDRANT

 EXISTING BACKFLOW PREVENTER

 EXISTING FIRE DEPARTMENT CONNECTIONS & POST INDICATOR VALVE

 FIRE LANE

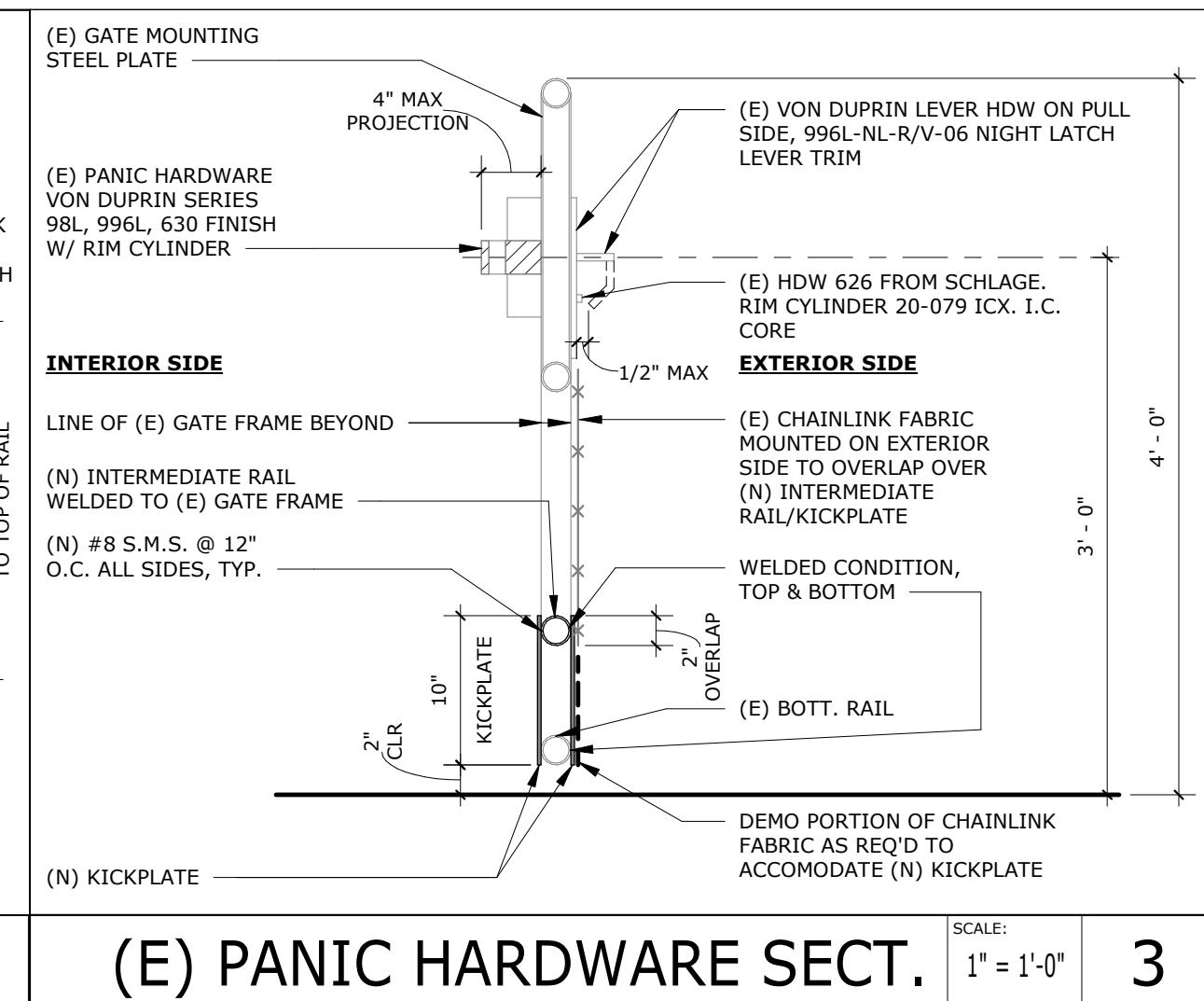
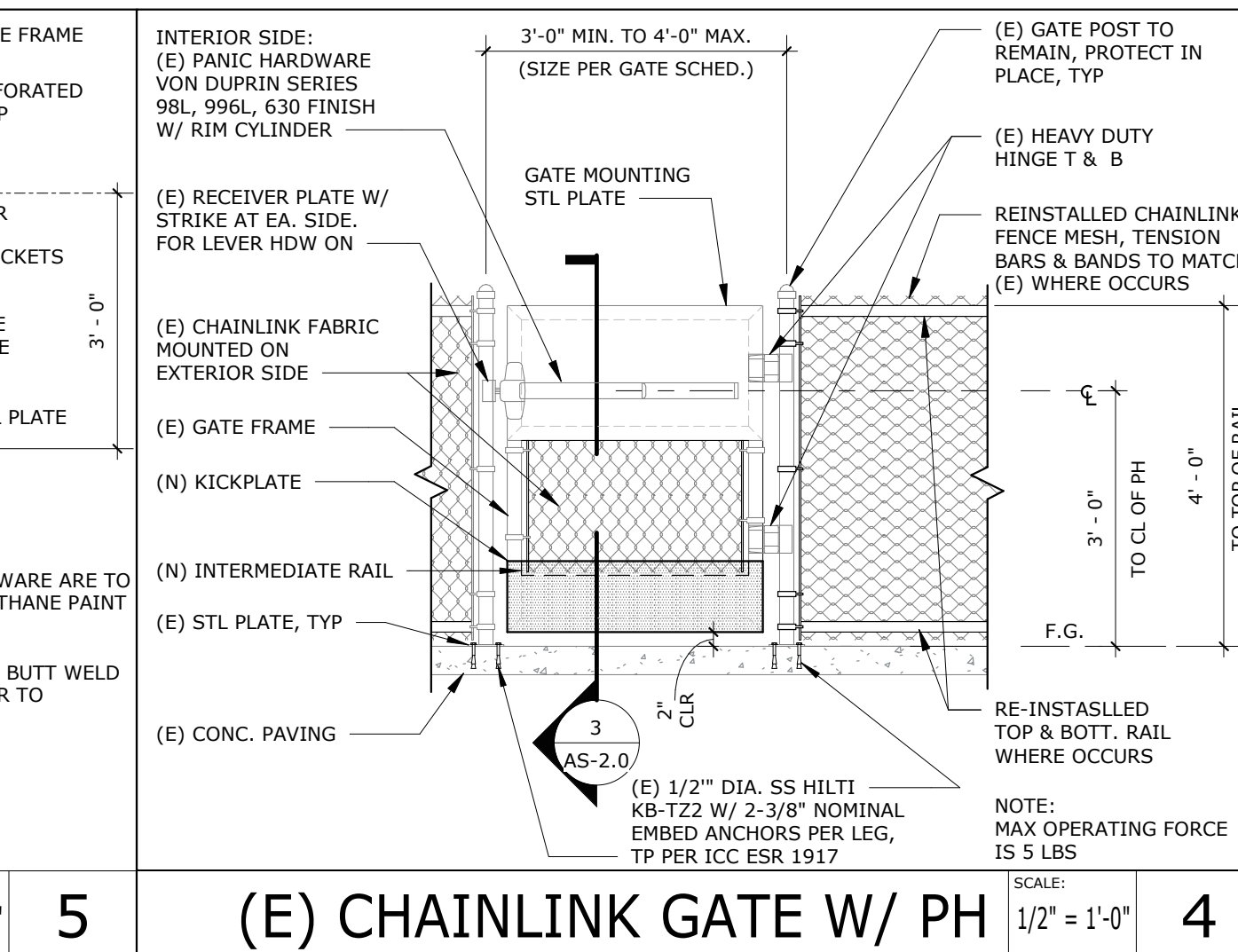
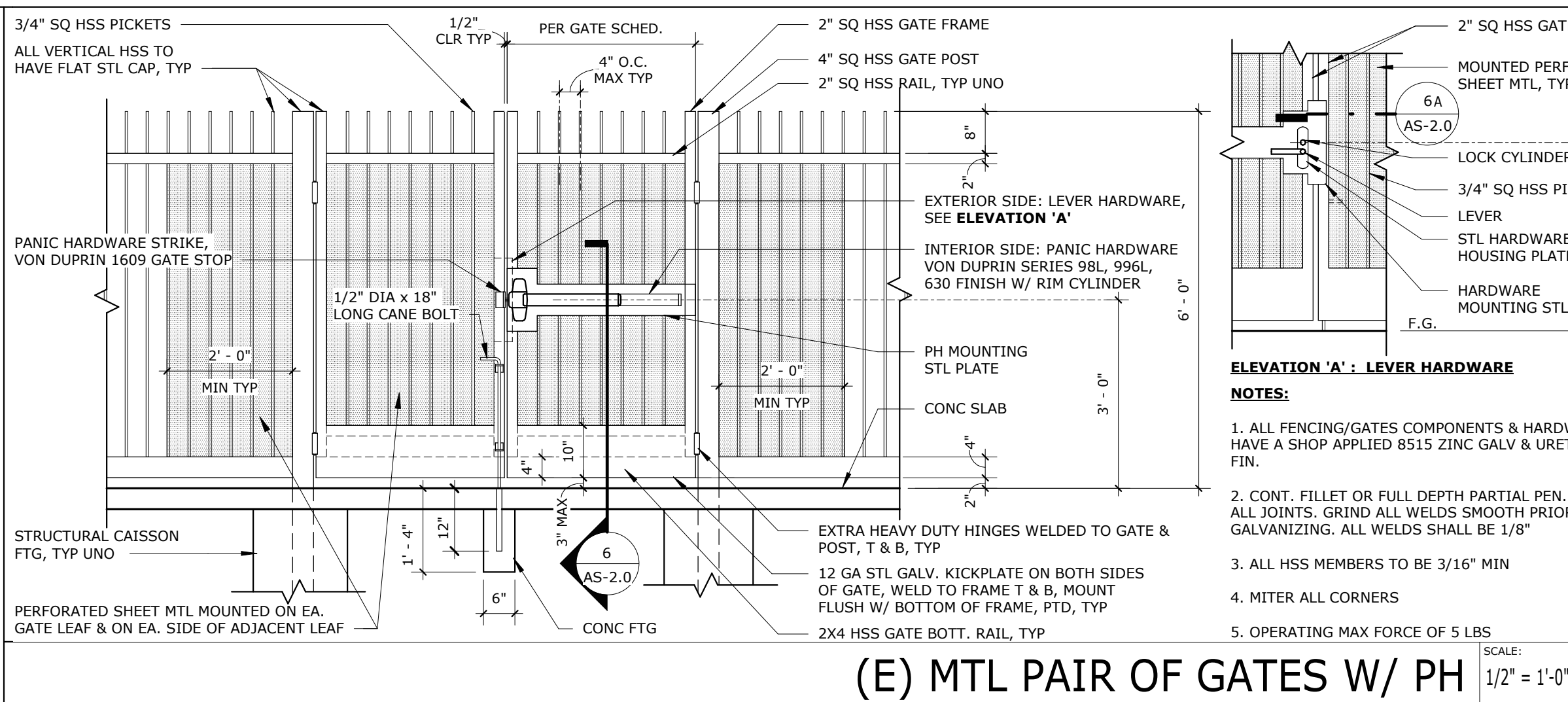
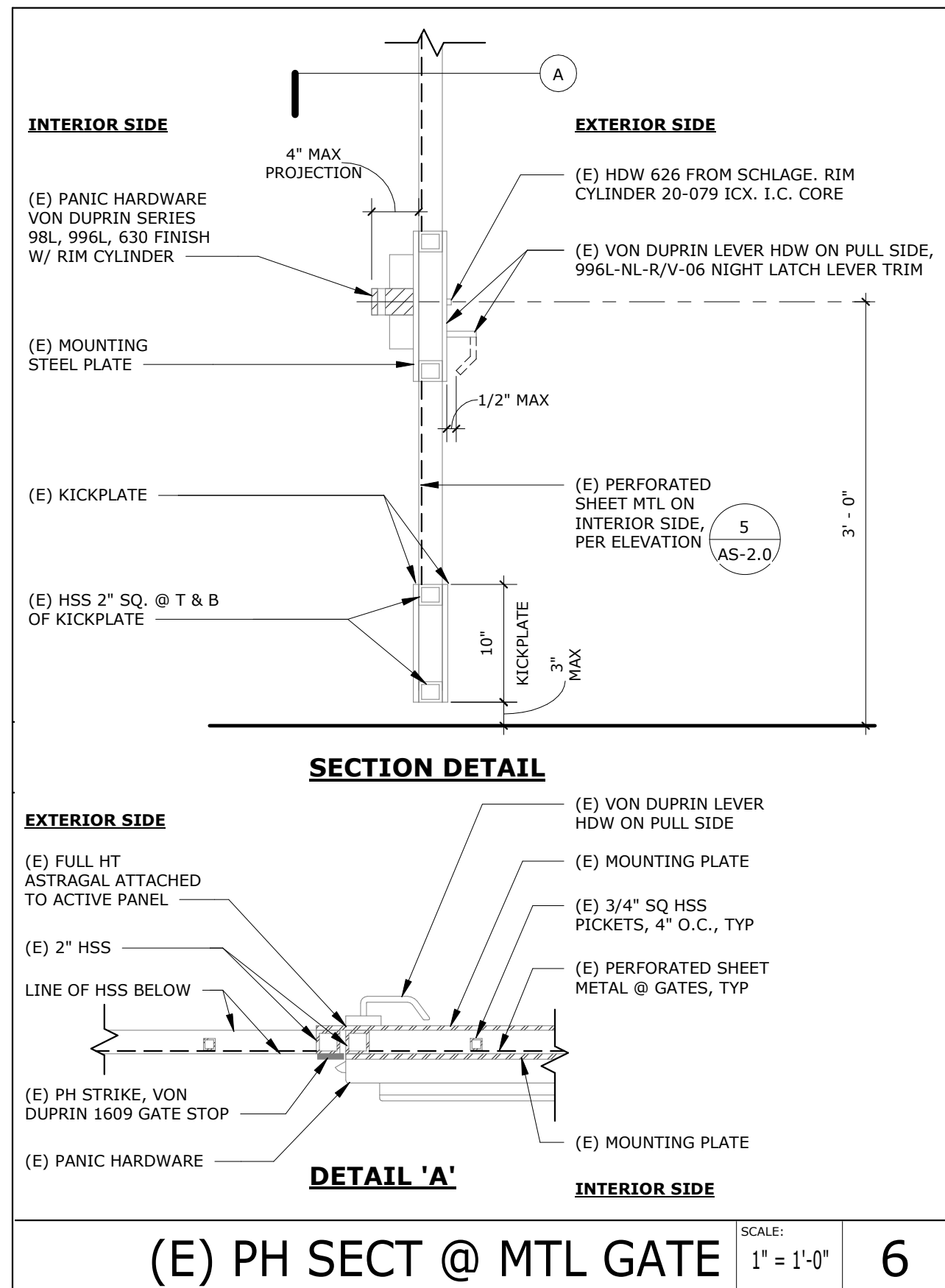
INDICATES EXISTING 20'-0" MIN. WIDE, FIRE TRUCK ACCESS LANE WITH ALL REQUIRED PAINTING OF CURBS AND ALL SIGNAGE PER LOCAL FIRE AUTHORITY.  
FIRE LANE SHALL SUSTAIN A LOAD OF 80,000 LBS.  
CONTRACTOR TO PROVIDE ANY MISSING REQUIREMENTS OF ALL THE ABOVE.



OVERALL SITE PLAN

AS-1.0





SEAL OF THE ARCHITECT

IDENTIFICATION STAMP

DIV. OF THE STATE ARCHITECT

APP: 04-121137 INC.

REVIEWED FOR

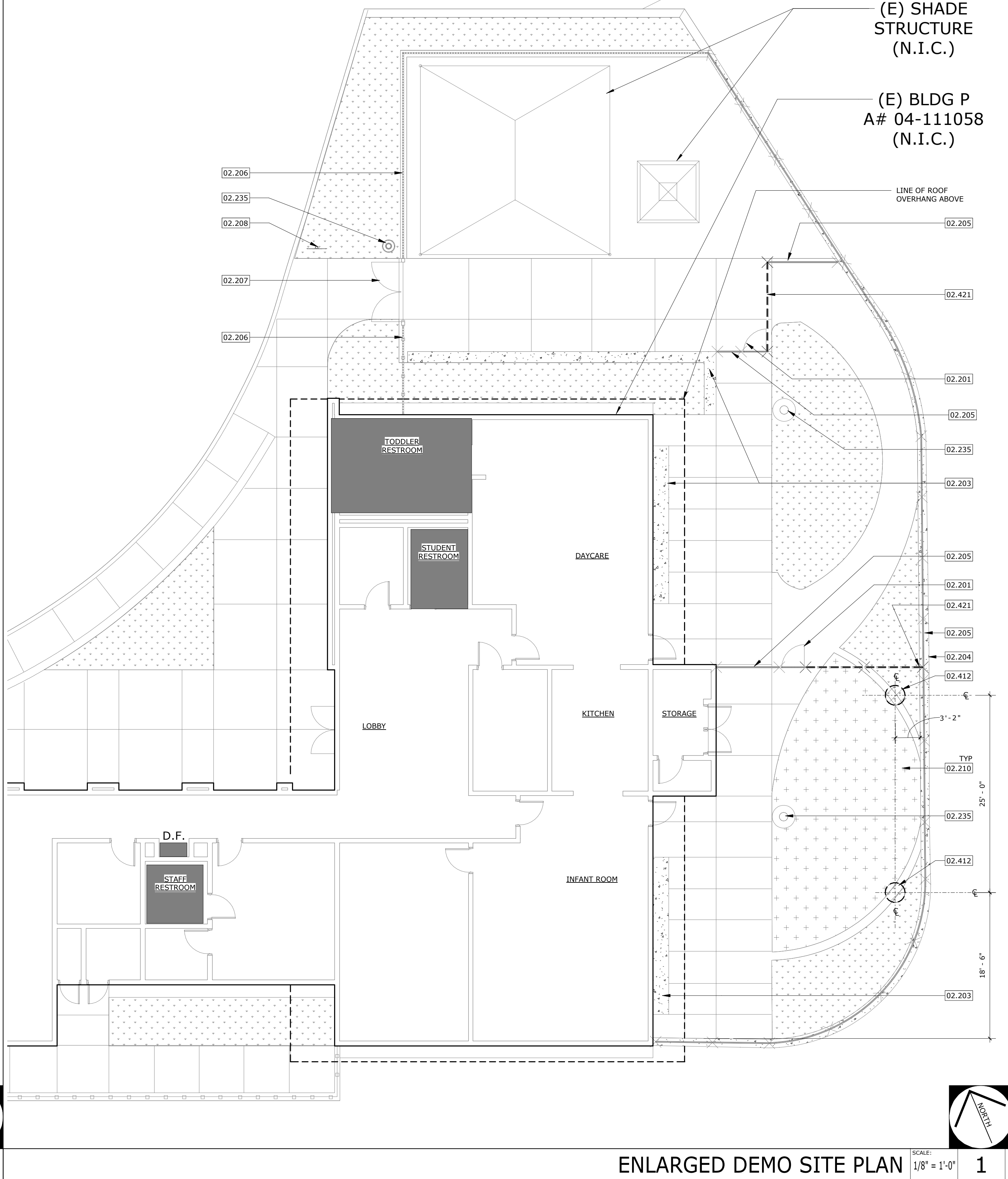
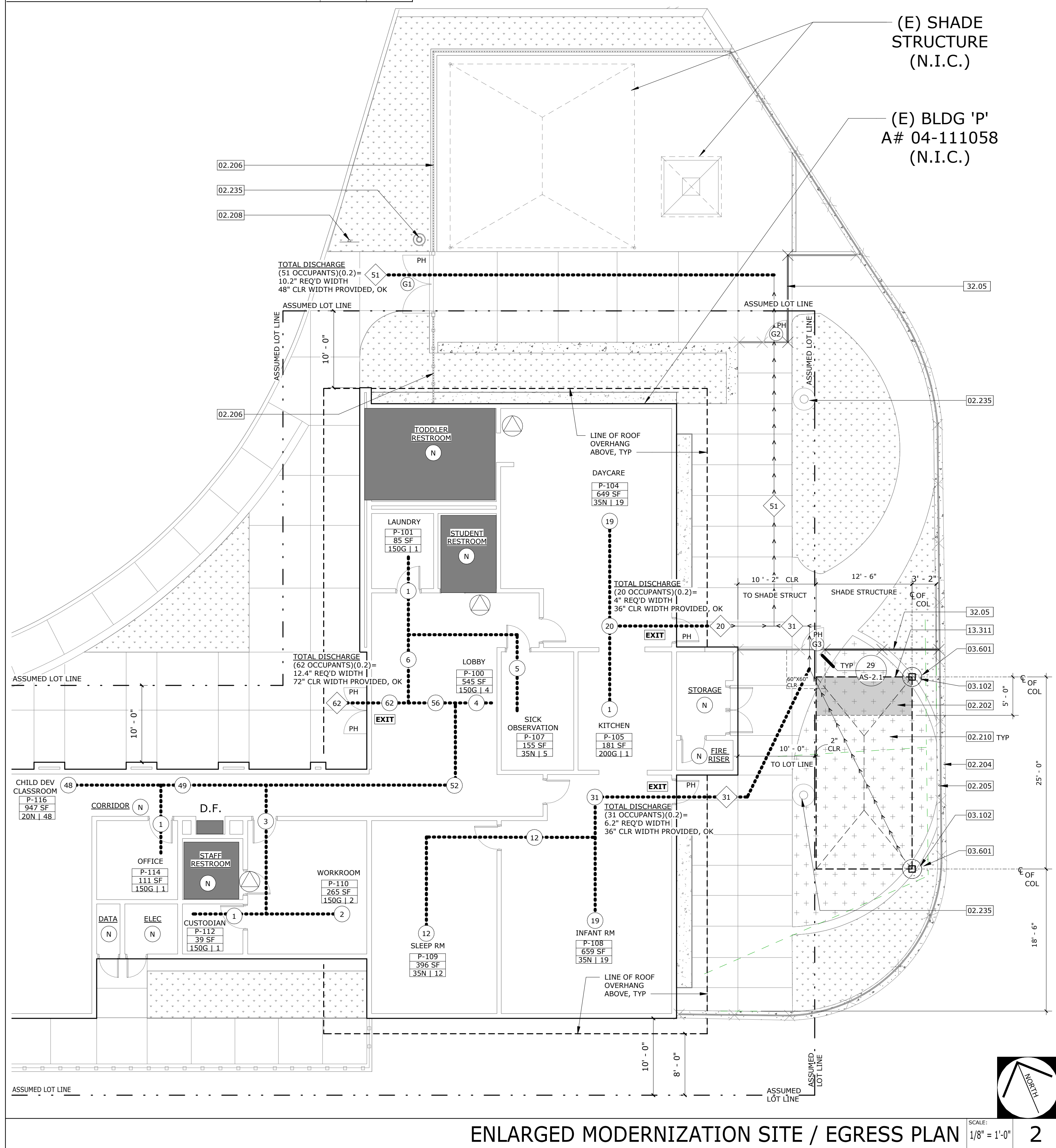
SS ☒ FLS ☒ ACS ☒

DATE: 08/31/2022

RUHNAU CLARKE ARCHITECTS

Heading	ITEM	MATERIAL	LOCATION
PRE-ENGINEERED FABRIC SHADE STRUCTURES	FSS-1	USE SHADE, COLOURSHADE FR 'BLUE' W/ 'WHITE' #11518WHT POWDER COATING	EXTERIOR

Heading	ITEM	MATERIAL	LOCATION
PRE-ENGINEERED FABRIC SHADE STRUCTURES	FSS-1	USE SHADE, COLOURSHADE FR 'BLUE' W/ 'WHITE' #11518WHT POWDER COATING	EXTERIOR



**GENERAL NOTES**

1. ALL FIRE HYDRANTS, FLOW RATES, AND CLEARANCES ARE EXISTING WILL REMAIN UNCHANGED.
2. DURING CONSTRUCTION PROVIDE CLEAR FIRE ACCESS AT ALL TIMES.
3. ALL STRUCTURES ARE IN COMPLIANCE WITH STATE OF CALIFORNIA FIRE CODE STANDARDS.
4. ALL GATES ON P.O.T. MUST HAVE PANIC HARDWARE.

**KEYNOTES**

02.201 EXISTING CHAINLINK SINGLE GATE & POSTS TO REMAIN, PROTECT IN PLACE

02.202 EXISTING RUBBER MAT AREA OF 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS, 5'-0" x 10'-0" MIN

02.203 EXISTING CONCRETE BENCH

02.204 EXISTING RETAINING WALL TO REMAIN PER A#04-111058

02.205 EXISTING CHAINLINK FENCE TO REMAIN, PROTECT IN PLACE

02.206 EXISTING STEEL FENCE TO REMAIN, PROTECT IN PLACE

02.207 EXISTING STEEL GATE TO REMAIN, PROTECT IN PLACE

02.208 EXISTING ACCESSIBLE DIRECTIONAL SIGN, POLE MOUNTED, REFER TO DETAIL 21/AS-2.1

02.210 EXISTING RUBBER MAT PLAY SURFACE TO REMAIN

02.235 EXISTING LIGHT POLE TO REMAIN, PROTECT IN PLACE

02.412 DEMO PORTION OF (E) TURF AS REQUIRED, CONCRETE & RUBBER MAT AND PREPARE FOR NEW FOOTING

02.421 REMOVE PORTION OF (E) CHAINLINK FENCE FROM GATE POST TO END OF FENCE. STORE ALL PARTS FOR REINSTALLATION

03.102 (N) CONCRETE FOOTING PER PC DWGS

03.601 (N) TURF PATCHING IN AREAS AROUND SHADE STRUCTURE POST

13.311 NEW PREFABRICATED 12'-6" x 30'-0" FULL CANT H/P SINGLE SHADE STRUCTURE PER PC DWGS

32.05 REINSTALL PORTION OF EXISTING CHAINLINK FENCE, REFER TO DETAIL 25/AS-2.1

**SITE LEGEND**

⊙# GATE IDENTIFICATION NUMBER, SEE SCHEDULE IN SHEET AS-1.0

**EXISTING**

— (E) CHAINLINK FENCE

— (E) CONCRETE

— (E) TURF

— (E) RUBBER MAT 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

**DEMOLITION**

--- (N) CHAINLINK FENCE

--- (N) CONCRETE 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

**NEW**

— (N) CHAINLINK FENCE

— (N) CONCRETE 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

**EGRESS & SIGNAGE LEGEND**

← PATH OF TRAVEL / EGRESS 1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

--- PATH OF TRAVEL A# 04-111058, FOR P.O.T. CONTINUATION, SEE SHEET AS-1.0

ROOM TAG

Room name [100] —

Room Area [100] —

— OCCUPANT LOAD

— OCCUPANT LOAD FACTOR

⊙ NON-OCCUPIED ROOM

# ROOM OCCUPANCY DISCHARGE

# TOTAL OCCUPANCY DISCHARGE

EXIT EXIT SIGN

⊙ UNISEX DOOR SIGN







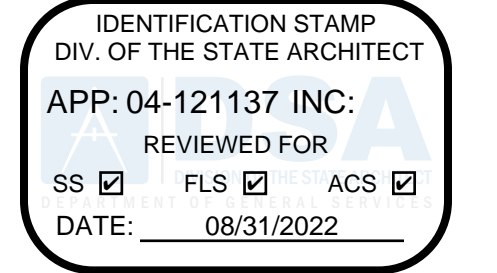


# FABRIC SHADE STRUCTURE

## DSA P.C. 04-119455

### SITE SPECIFIC APPLICATION SITE PLAN SHALL INCLUDE:

1. ACTUAL DIMENSIONS OF SHADE STRUCTURES.
2. DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES.
3. PROVIDE CODE ANALYSIS INCLUDING ACTUAL SHADE STRUCTURE AREA (SQ. FT.), OCCUPANCY TYPE (A-3), AND TYPE OF CONSTRUCTION (V-B). INDICATE OCCUPANT LOAD FACTOR per 2019 CBC, SECTION 1004.
4. INDICATE LOCATIONS OF FIRE EXTINGUISHER WITHIN 75 FEET.
5. SHOW LOCATIONS OF AUDIBLE FIRE ALARM.
6. INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE. MINIMUM DIMENSION OF 20' FOR SNOW LOAD MODEL (ASCE 7-16).
7. ACTUAL SITE ELEVATION (FT.) TO DETERMINE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-16 (FOR SNOW LOAD MODEL).
8. FOR RECESSED BASE PLATE (RBP) OPTION: ARCHITECT/ENGINEER OF RECORD TO SPECIFY THE LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST), AS DEFINED IN AISC 341-10 SECTION A.3.4b, A4.1 AND A4.2 PER NOTE ON EACH INDIVIDUAL MODEL ENGINEERING DRAWING WHICH RELATES TO DEMAND CRITICAL WELD AND "L.A.S.T." TEMPERATURE (EITHER STRUCTURAL STEEL NOTE #14).
9. COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER, AND SPECIFIC SIZE OF SHADE STRUCTURE.
10. ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES "A, B & C" RESPECTIVELY IN ASCE 19-16, "STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS."
11. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN MAPPED GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.
12. ARCHITECTS OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN A MAPPED FIRE HAZARD SEVERITY ZONE OR WILDLAND INTERFACE AREA.



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN

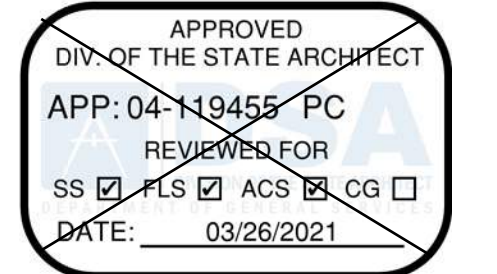
**USASHADE & Fabric Structures**

**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:**  
Grossmont Union High School District  
PROJECT NAME:  
Grossmont Child Care Center  
LOCATION:  
1100 Murray Ave.  
El Cajon, CA 92020  
MODEL NUMBER:

### GENERAL NOTES



### SITE SPECIFIC APPLICATION TITLE SHEET SHALL INCLUDE:

#### PARTIAL LIST OF APPLICABLE CODES

- 2019 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
- (2018 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
- (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
- (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
- (2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
- (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R.
- (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
- 2016 ASME A17.1/CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2019 CBC, PART 2, CHAPTER 35)

NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES C.C.R. TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

#### PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS	2016 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 20	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION	2016 EDITION
NFPA 22	STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES	2016 EDITION
NFPA 72	NATIONAL FIRE ALARM & SIGNALING CODE (CA AMENDED)	2016 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES	2003 EDITION
UL521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 (R2010)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS	2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

SEE INDIVIDUAL STRUCTURAL DRAWINGS FOR SPECIFIC DESIGN NOTES AND LOADING.

ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (C.C.R.).

ALL WORK SHALL BE IN COMPLIANCE WITH CFC CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

MODEL: DSA4012030-19 STRUCTURE: 20'X30'X15' HIP UNIT MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY * 40	MODEL: DSA4013030-19 STRUCTURE: 30'X30'X15' HIP UNIT MAX. AREA - 900 SQ. FT. MAX. OCCUPANCY * 60	MODEL: DSA4013040-19 STRUCTURE: 30'X40'X15' HIP UNIT MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY * 80	MODEL: DSA401S2030-19 STRUCTURE: 20'X30'X12' HIP (20 PSF SNOW LOAD) MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY * 40
MODEL: DSA4070600-19 STRUCTURE: 60'X60'X14' MARINER PEAK QUAD MAX. AREA - 3600 SQ. FT. MAX. OCCUPANCY * 120	MODEL: DSA407J3060-19 STRUCTURE: 20'X60'X14' MARINER PEAK JOINED MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY * 120	MODEL: DSA4183030-19 STRUCTURE: 30'X30'X14' TENSION SAILS JOINED MAX. AREA/SAIL - 480 SQ. FT./SAIL MAX. OCCUPANCY / SAIL * 60	MODEL: DSA4073030-19 STRUCTURE: 30'X30'X12' TENSION SAILS JOINED MAX. AREA/SAIL - 480 SQ. FT./SAIL MAX. OCCUPANCY / SAIL * 120
NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS	NUMBER OF UNITS JOINED IS GOVERNED BY TOTAL AREA, OCCUPANCY AND SITE CONDITIONS

DRAWING NUMBER	DRAWING DESCRIPTION	STRUCTURE TYPE	MAX SIZE	MODEL NUMBER
X P.C. T-1.0	P.C. TITLE SHEET			
P.C. T-2.0	DSA 103 SAMPLE FORM			
X P.C. T-2.1	DSA 103 SAMPLE FORM			
X P.C. T-3.0	DSA 103 SAMPLE FORM			
X P.C. T-3.1	DSA 103 SAMPLE FORM			
1.1-1000	PRODUCT INFORMATION	HIP	20 X 30	DSA4012030-19
1.2-2000	REACTIONS	HIP	20 X 30	DSA4012030-19
2.1-1000	PRODUCT INFORMATION	HIP	30 X 30	DSA4013030-19
2.2-2000	REACTIONS	HIP	30 X 30	DSA4013030-19
3.1-1000	PRODUCT INFORMATION	HIP	30 X 40	DSA4013040-19
3.2-2000	REACTIONS	HIP	30 X 40	DSA4013040-19
4.1-1000	PRODUCT INFORMATION	HIP (20# SNOW LOAD)	20 X 30	DSA401S2030-19
4.2-2000	REACTIONS	HIP (20# SNOW LOAD)	20 X 30	DSA401S2030-19
5.1-1000	PRODUCT INFORMATION	SINGLE POST PYRAMID	14 X 14	DSA1031414-19
5.2-2000	REACTIONS	SINGLE POST PYRAMID	14 X 14	DSA1031414-19
6.1-1000	PRODUCT INFORMATION	MARINER	30 X 30	DSA4073030-19
6.2-2000	REACTIONS	MARINER	30 X 30	DSA4073030-19
7.1-1000	PRODUCT INFORMATION	JOINED MARINER	30 X 200	DSA407J3060-19
7.2-2000	REACTIONS	JOINED MARINER	30 X 200	DSA407J3060-19
8.1-1000	PRODUCT INFORMATION	QUAD MARINER	60 X 60	DSA407Q6060-19
8.2-2000	REACTIONS	QUAD MARINER	60 X 60	DSA407Q6060-19
X 9.1-1000	PRODUCT INFORMATION	FULL CANTILEVER	20 X 30	DSA2022030-19
X 9.2-2000	REACTIONS	FULL CANTILEVER	20 X 30	DSA2022030-19
10.1-1000	PRODUCT INFORMATION	FULL CANTILEVER JOINED	20 X 300	DSA3022060-19
10.2-2000	REACTIONS	FULL CANTILEVER JOINED	20 X 300	DSA3022060-19
11.1-1000	PRODUCT INFORMATION	TRI TRUSS CANTILEVER	20 X 30	DSA2062030-19
11.2-2000	REACTIONS	TRI TRUSS CANTILEVER	20 X 30	DSA2062030-19
12.1-1000	PRODUCT INFORMATION	TRI TRUSS CANTILEVER JOINED	20 X 300	DSA3052060-19
12.2-2000	REACTIONS	TRI TRUSS CANTILEVER JOINED	20 X 300	DSA3052060-19
13.1-1000	PRODUCT INFORMATION	THREE POINT SAILS	30 X 200	DSA30730-19
13.2-2000	REACTIONS	THREE POINT SAILS	30 X 200	DSA30730-19
14.1-1000	PRODUCT INFORMATION	FOUR-POINT SAILS	20 X 300	DSA4182020-19
14.2-2000	REACTIONS	FOUR-POINT SAILS	20 X 300	DSA4182020-19
15.1-1000	PRODUCT INFORMATION	FOUR POINT SAILS	30 X 200	DSA4183030-19
15.2-2000	REACTIONS	FOUR POINT SAILS	30 X 200	DSA4183030-19

### SHEET INDEX - P.C. DRAWINGS

DAVID HIGGINSON, AIA, ARCHITECT  
38868 BUTTERFLY DRIVE  
YUCAIPA, CA 92399  
(909) 499-0058  
dhigginson.arch@gmail.com



MARK LOWE, S.E.  
STRUCTURAL ENGINEER

19471 MISTY RIDGE LANE  
TRABUCO CANYON, CALIFORNIA  
92367  
PH. 949-400-1265  
malowe@me.com



### STRUCTURE TYPE:

### SCALE : VARIES

### DRAWING SIZE: D

### PRE-CHECK (PC) DOCUMENT

Code : 2019 CBC  
A separate project application for construction is required.

Eng. By : DWH 09/18/20

Design By : DWH 09/18/20

Approved By : DWH 09/18/20

### DRAWING DESCRIPTION:

### P.C. TITLE SHEET

### DWG.

SHEET P.C. T-1.0

### REV.

### BUILDING CODE DATA

### UNIT SELECTION AND DESCRIPTION

### ARCHITECT OF RECORD

### ENGINEER OF RECORD



**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

**2019 CBC**

**IMPORTANT:** This form is only a sample 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 (2019 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 – 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 – 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 – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. SI – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 1 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

**Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report**

1. GENERAL:	Table 1705A.6
Test or Special Inspection	Type Performed By Code References and Notes
<input checked="" type="checkbox"/> 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 are adequate to achieve the design bearing capacity.	See Notes PI Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without a geotechnical report.

2. SOIL COMPACTION AND FILL:	Table 1705A.6
Test or Special Inspection	Type Performed By Code References and Notes
<input checked="" type="checkbox"/> a. Verify use of proper materials, densities and inspect lift thicknesses, 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.
<input checked="" type="checkbox"/> b. 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.

3. DRIVEN DEEP FOUNDATIONS (PILES):	Table 1705A.7
-------------------------------------	---------------

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 2 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> b. Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.
<input checked="" type="checkbox"/> c. Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> 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.
<input checked="" type="checkbox"/> e. Steel piles.	Provide tests and inspections per STEEL section below.		
<input checked="" type="checkbox"/> f. Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
<input checked="" type="checkbox"/> g. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):	Table 1705A.8
Test or Special Inspection	Type Performed By Code References and Notes

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 3 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input checked="" type="checkbox"/> 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.
<input checked="" type="checkbox"/> 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.
<input checked="" type="checkbox"/> c. Concrete piers.	Provide tests and inspections per CONCRETE section below.		

5. RETAINING WALLS:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Placement, compaction and inspection of backfill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> b. Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> c. Segmental retaining walls: inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> d. Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
<input checked="" type="checkbox"/> e. Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

6. OTHER SOILS:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 4 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input checked="" type="checkbox"/> 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 for final acceptance. * By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> b. Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
<input checked="" type="checkbox"/> c.			

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 5 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

7. CAST-IN-PLACE CONCRETE	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Verify use of required design mix.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1.
<input checked="" type="checkbox"/> b. Identify, sample, and test reinforcing steel.	Test	LOR	1910A.2; ACI 318-14 Section 26.6.1.2; DSA IR 17-10. (See Appendix for exemptions.)
<input checked="" type="checkbox"/> c. During concrete placement, fabricate specimens for strength tests, perform slump and/or content tests, and determine the temperature of the concrete.	Test	LOR	Table 1705A.3 Item 6; ACI 318-14 Sections 26.5 & 26.12.
<input checked="" type="checkbox"/> d. Test concrete (f'c).	Test	LOR	1905A.1.15; ACI 318-14 Section 26.12.
<b>Inspection:</b>			
<input checked="" type="checkbox"/> 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 eliminated per 1705A.3.3.2. (See Appendix for exemptions.)
<input checked="" type="checkbox"/> f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category 19.1(d) & (e) and/or 19.2(g) & (h) below.		

8. PRESTRESSED / POST-TENSIONED CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
---	------	--------------	---------------------------

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 6 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
<input checked="" type="checkbox"/> b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 6.
<input checked="" type="checkbox"/> c. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 11. Special inspector to verify specified concrete strength test prior to stressing.
<input checked="" type="checkbox"/> 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 318-14 Section 26.13

9. PRECAST CONCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-14 Section 26.13.
<input checked="" type="checkbox"/> b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.

10. SHOTCRETE (in addition to Cast-in-Place Concrete tests and inspections):	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 7 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Concrete), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input checked="" type="checkbox"/> a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.19, Table 1705A.3 Item 7, 1908A.6, 1908A.7, 1908A.8, 1908A.9, 1908A.11, 1908A.12. See ACI 308-2.13 Section 3.4, ACI 308-16.
<input checked="" type="checkbox"/> b. Sample and test shotcrete (f'c).	Test	LOR	1908A.5, 1908A.10.

11. POST-INSTALLED ANCHORS:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> 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 for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
<input checked="" type="checkbox"/> b. Test post-installed anchors.	Test	LOR	1910A.5. (See Appendix for exemptions.)

12. OTHER CONCRETE:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a.			

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 8 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

17. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES	Type	Performed By	Code References and Notes
Material Verification and Testing:	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> 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, 2202A.1; AISI 5100-16 Section A3.1 & A3.2, AISI 5240-15 Section A3.8, and AISI 5220-15 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
<input checked="" type="checkbox"/> b. Test unidentified materials.	Test	LOR	2202A.1.
<input checked="" type="checkbox"/> c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
<b>Inspection:</b>			
<input checked="" type="checkbox"/> 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).

18. HIGH-STRENGTH BOLTS: RCSC 2014	Type	Performed By	Code References and Notes
Material Verification and Testing of High-Strength Bolts, Nuts and Washers:	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> 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; AISI 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.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 9 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input checked="" type="checkbox"/> 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.
<b>Inspection of High-Strength Bolt Installation:</b>			
<input checked="" type="checkbox"/> c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2; AISI 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
<input checked="" type="checkbox"/> d. Pretensioned and slip-critical connections.	*	SI	Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; AISI 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.

19. WELDING:	Type	Performed By	Code References and Notes
Verification of Materials, Equipment, Welders, etc.:	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
<input checked="" type="checkbox"/> b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
<input checked="" type="checkbox"/> c. Verify WPS welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 10 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

19.1 SHOP WELDING:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> 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; AISI 360-16 (and AISI 341-16 as applicable); DSA IR 17-3.
<input checked="" type="checkbox"/> 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; AISI 360-16 (and AISI 341-16 as applicable); DSA IR 17-3.
<input checked="" type="checkbox"/> c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.1; AISI 360-16 (and AISI 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
<input checked="" type="checkbox"/> d. Verification of reinforcing steel weldability	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
<input checked="" type="checkbox"/> 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.

19.2 FIELD WELDING:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> 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; AISI 360-16 (and AISI 341-16 as applicable); DSA IR 17-3.
<input checked="" type="checkbox"/> b. Inspect single-pass fillet welds ≤ 5/16".	Periodic	SI	Table 1705A.2.1 Item 5a.5; AISI 360-16 (and AISI 341-16 as applicable); DSA IR 17-3.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 11 of 20

**DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC**

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input checked="" type="checkbox"/> c. Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	2213A.2; AISI 360-16 (and AISI 341-16 as applicable); AWS D1.1; DSA IR 17-3.
<input checked="" type="checkbox"/> d. Inspect floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Item 5a.6; AISI 360-16 (and AISI 341-16 as applicable); AWS D1.3; DSA IR 17-3.
<input checked="" type="checkbox"/> 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 S240-15 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
<input checked="" type="checkbox"/> f. Inspect welding of stairs and railing systems.	Periodic	SI*	1705A.2.1; AISI 360-16 (and AISI 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.
<input checked="" type="checkbox"/> 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.
<input checked="" type="checkbox"/> 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.

20. NONDESTRUCTIVE TESTING:	Type	Performed By	Code References and Notes
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Ultrasonic	Test	LOR	1705A.2.1, 1705A.2.5; AISI 341-16 J6.2, AISI 360-16 N5.5; ANS/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 12 of 20

IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT  
APP: 04-121137 INC:  
REVIEWED FOR  
SS ☒ FLS ☒ ACS ☒  
DATE: 08/31/2022

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN



**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:**

Grossmont Union High  
School District

**PROJECT NAME:**

Grossmont  
Child Care Center

**LOCATION:**

1100 Murray Ave.  
El Cajon, CA 92020

**MODEL NUMBER:**



DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC  
1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16  
Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input type="checkbox"/> b. Magnetic Particle	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
<input type="checkbox"/> c.	Test	LOR	

21. STEEL JOISTS AND TRUSSES: 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16			
Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> 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.

22. SPRAY APPLIED FIRE-PROOFING: 1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16			
Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> 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.14.
<input type="checkbox"/> b. Test bond strength.	Test	LOR	1705A.14.6.

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 13 of 20

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Steel and Aluminum), 2019 CBC  
1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16  
Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input type="checkbox"/> c. Test density.	Test	LOR	1705A.14.5.
---	------	-----	-------------

23. ANCHOR BOLTS AND ANCHOR RODS:			
Test or Special Inspection	Type	Performed By	Code References and Notes
<input checked="" type="checkbox"/> a. Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
<input type="checkbox"/> b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

Other Steel			
Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> a.			

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 14 of 20

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (Other), 2019 CBC  
Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

26. OTHER:			
Test or Special Inspection	Type	Performed By	Code References and Notes
<input type="checkbox"/> a. Load test for identified product(s):	Test	LOR	1709A.2, 1709A.3. Testing is not required for: 1) a product with a valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural calculation.
<input type="checkbox"/> b. Installation torque for non-HS bolts	Continuous	SI*	Applicable to communication towers identified as Essential Service Facility Projects (ESFP). Calibrated wrench use required, verified by SI during installation. DSA Policy PL 18-01: Communication Towers, Poles and Buildings Utilized by State Agencies for Essential Services Communications *EXCEPTION: Non-ESFP may use PI without need for notification to DSA.
<input type="checkbox"/> c.			

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 15 of 20

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

Exempt items given in DSA IR A-22 or the 2019 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:	
<input type="checkbox"/> 1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no 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.	
<input type="checkbox"/> 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 framework (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.	

CONCRETE/MASONRY:	
<input type="checkbox"/> 1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding") 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."	
<input type="checkbox"/> 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.	

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 16 of 20

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input type="checkbox"/> 3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
<input type="checkbox"/> 4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.
<input type="checkbox"/> 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:	
<input type="checkbox"/> 1. Solid-clad and open-mesh gates with maximum lead span or rolling section for rolling gates of 10' and apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.	
<input type="checkbox"/> 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.	
<input type="checkbox"/> 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 10x10' opening in a 15' tall wall for a header or king stud.	
<input type="checkbox"/> 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 2000lb (equipment only) connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections 19, 19.1 and/or 19.2 of listing above).	
<input type="checkbox"/> 5. Manufactured components (e.g., Tokco, 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 19, 19.1 and/or 19.2 of listing above).	

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 17 of 20

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

<input type="checkbox"/> 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 section 19, 19.1 and/or 19.2 located in the Steel/Aluminum category).
<input type="checkbox"/> 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.

THE SAMPLE DSA-103 FORM SHOWN ON THIS SHEET IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECTS SPECIFIC FORM DSA-103. A CURRENT DSA-103 FORM IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL SAMPLE DSA-103 SHEETS ARE TO BE CROSSED OUT ON THIS DRAWING.

ADDITIONAL TESTING AND INSPECTION NOTES:

- THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.
- THE SITE PROJECT INSPECTOR SHALL BE CLASS 2.
- THE COSTS OF THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT.
- COPIES OF VERIFIED REPORTS SHALL BE SENT TO DSA, THE ARCHITECT, THE SCHOOL DISTRICT, THE CONTRACTOR, AND THE PROJECT INSPECTOR.
- THE IN PLANT INSPECTOR SHALL BE WELDING SPECIAL INSPECTOR FOR MATERIAL VERIFICATION AND WELDING.
- PER 2019 CBC, SECTION 1705A.3.3, BATCH PLANT INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET:
  - A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
  - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK IT'S LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

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
-----------

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 19 of 20

DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number: School Name: School District:  
04-119455 TBD USA Shade & Fabric Structures  
DSA File Number: Increment Number: Date Created:  
2021-03-25 21:00:56

- ~~Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293~~
- Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
- Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
- Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

DGS DSA 103-19 (Revised 07/16/2020)  
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA  
Page 20 of 20

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT		
APP: 04-121137 INC:		
REVIEWED FOR		
SS <input checked="" type="checkbox"/>	FLS <input checked="" type="checkbox"/>	ACS <input checked="" type="checkbox"/>
DATE: 08/31/2022		

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN



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:

Grossmont Union High  
School District

PROJECT NAME:

Grossmont  
Child Care Center

LOCATION:

1100 Murray Ave.  
El Cajon, CA 92020

MODEL NUMBER:

APPROVED DIV. OF THE STATE ARCHITECT		
APP: 04-119455 PC		
REVIEWED FOR		
SS <input checked="" type="checkbox"/>	FLS <input checked="" type="checkbox"/>	ACS <input checked="" type="checkbox"/>
DATE: 03/26/2021		

STRUCTURE TYPE:

SCALE : VARIES

DRAWING SIZE:

D

PRE-CHECK (PC)  
DOCUMENT

Code : 2019 CBC  
A separate project application  
for construction is required.

Eng. By :	DWH	09/14/20
Design By :	DWH	09/14/20
Approved By :	DWH	09/14/20

DRAWING DESCRIPTION:

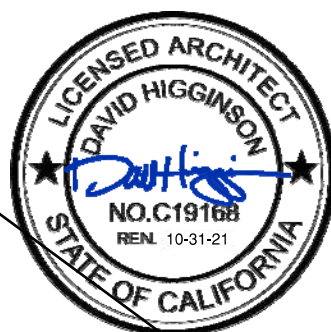
DSA 103 SAMPLE FORMS

DWG.

SHEET

P.C. T-3.1

REV.





GENERAL NOTES  
DESIGN LOADS

BUILDING CODE	CBC 2019 (BASED ON IBC 2018)
LIVE LOADS	5 PSF
SNOW LOAD	5 PSF
WIND LOADS	115 MPH (3-Sec. Gust); EXPOSURE C; TOPOGRAPHIC FACTOR, $K_{zt} = 1.0$

1.- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED SAMPLE TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. 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 2019 CHAPTER 17A. THE FIELD SPECIAL INSPECTION SHALL INCLUDE COMPRESSION CYLINDER TESTS FOR THE CONCRETE FOUNDATION.

2.- STRUCTURE SHALL BE IN THE LOCATION SHOWN ON THE SITE SPECIFIC DSA APPLICATION DRAWING.

3.- FOUNDATION DESIGN BASED ON CBC 2019, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

4.- DESIGN PER FOLLOWING CODES: CBC 2019, ASCE 7-16, AISC 360-16, AISC 341-16, ACI 318-14, ASCE 55-16 & ASCE 19-16

STRUCTURAL STEEL

1.- FABRICATION OF THE STEEL STRUCTURES SHALL BE PERFORMED BY SHADE STRUCTURES OR AN AUTHORIZED LICENSEE. MATERIAL TESTING (OR MILL CERTIFICATES) AND INSPECTION OF WELDING SHALL BE CONDUCTED PER CBC 2019 SECTIONS 1704A, 1705A, 1705A.2, AND TABLE 1705A.2.1.

2.- ONLY CALIFORNIA LICENSED CONTRACTORS AUTHORIZED BY SHADE STRUCTURES SHALL INSTALL THE SHADE STRUCTURES.

3.- ALL WORK SHALL CONFORM TO CBC 2019 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 A500-16, IN ITS' ENTIRETY. TYPICAL MECHANICAL PROPERTIES ARE:

ROUND TUBE 42,000 PSI YIELD STRESS MINIMUM / 48,000 PSI TENSILE STRESS MINIMUM

5.- ALL STRUCTURAL SHAPES SHALL BE COLD FORMED HSS ASTM A500 GRADE B, UNLESS OTHERWISE NOTED. TYPICAL MECHANICAL PROPERTIES ACHIEVED FOR HSS PRODUCTS:

SQUARE AND RECTANGULAR 46,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

ROUND PIPE 42,000 PSI YIELD STRESS / 58,000 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. FIELD CONNECTIONS SHALL BE AS INDICATED ON THE DRAWINGS (IF REQUIRED). ALL FILLET WELDS SHALL BE A MINIMUM OF 3/16" E70SX ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.

11.- ALL STAINLESS STEEL BOLTS SHALL COMPLY WITH ASTM F-593, YIELD STRENGTH= 65 KSI, TENSILE STRENGTH=100 KSI MINIMUM, ALLOY GROUP 1, CONDITION CW1. ALL NUTS SHALL COMPLY WITH ASTM F-594 ALLOY GROUP 1, CONDITION CW1. REFERRING TO RCSC, ASTM F-593 IS NOT CONSIDERED AS HIGH STRENGTH BOLTS.

12.- ALL HIGH STRENGTH BOLTS SHALL COMPLY WITH ASTM F3125 GRADE A325 N (GALVANIZED), ALL NUTS SHALL COMPLY WITH ASTM A563DH, AND WASHERS SHALL COMPLY WITH ASTM F436. ALL HIGH STRENGTH BOLTS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION.

13.- 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.

14.- 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.

15.- COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION. ALL EXPOSED STEEL FASTENERS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), 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 2019 SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE  $F'_c = 4500$  PSI, TYPE V CEMENT, WATER/CEMENT RATIO OF 0.45, PER ACI 318-14 CHAPTER 5. REINFORCING STEEL TO BE  $F_y = 60000$  PSI, MIN. GR. 60

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED PER ASTM A153, CLASS D MINIMUM OR ASTM F2329). ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOW:

A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

5.- 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 MULTIKINT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED ON PAGE 2000, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.

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. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2261. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 1 OF "FABRIC SPECIFICATION" ON THE APPROVED PLANS. THE FABRIC SHALL BE REPLACED WHEN THE TEST RESULTS RETURN LESS THAN 50% OF THE ULTIMATE VALUES IN NOTE 1 OF "FABRIC SPECIFICATION". FIRE TEST ON FABRIC: NFPA 701 TEST 2 AND ASTM E 84 EXTENDED 30 MINUTES TEST, FLAME SPREAD INDEX (FSI): 10, SMOKE DEVELOPED INDEX (SDI): 50. 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 3/8" 7x19 GALV. CABLE PER ASTM A1023A, ASTM 1023M-02, WITH A BREAKING STRENGTH VALUE OF 14,400 LBS. CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM. THE MAXIMUM CALCULATED CABLE ALLOWABLE CAPACITY IS  $S_a = 4909$  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.

2019 CBC PC DESIGN NOTES

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

TWO TIMES THE TABULAR VALUE IS USED (200 PSF/FT)

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

ICE LOAD ZERO PSF

FLOOD HAZARD AREA

WHEN A SITE SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-16, SECTION 27.3.2

-BASIC DESIGN WIND SPEED (3 SEC GUST) V 115 MPH

-WIND EXPOSURE FACTOR C 1

-TOPOGRAPHIC FACTOR  $K_{zt}$  1

-RISK CATEGORY II 0.88

-VELOCITY PRESSURE EXPOSURE COEFFICIENT  $K_z$  0.88

-VELOCITY PRESSURE  $q_z$  25.32 PSF

SEISMIC DESIGN:

-SITE CLASS D SS 3.00g

-DESIGN BASE SHEAR S<sub>1</sub> 1.389g

SDS 2.00

SD1 1.39

-SPECTRAL RESPONSE COEFFICIENTS

-SEISMIC IMPORTANCE FACTOR I 1.0

-DESIGN BASE SHEAR V 6866 LB

-SEISMIC RESPONSE COEFFICIENTS C<sub>s</sub> 1.6

-RESPONSE MODIFICATION FACTOR R 1.25

-ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE

-RISK CATEGORY II

-SEISMIC DESIGN CATEGORY E

-SITE COEFFICIENT CATEGORY F<sub>a</sub> 1, F<sub>v</sub> 1.5

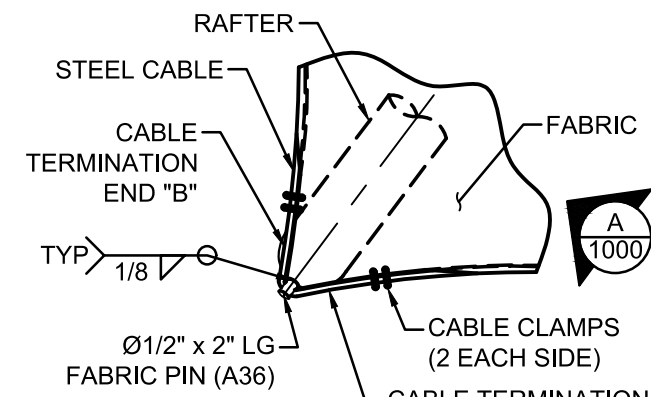
GEOHAZARD REPORT IS NOT REQUIRED FOR OPEN FABRIC STRUCTURES 1,600 SQF OR LESS COMPLYING WITH THE REQUIREMENTS OF IR A-4 SECTION 3.1.1. OPEN FABRIC SHADE STRUCTURES GREATER THAN 1,600 SQUARE FEET UP TO A MAXIMUM OF 4,000 SQUARE FEET AND COMPLYING WITH THE REQUIREMENTS NOTED IN IR A-4 SECTION 3.1.1 DO NOT REQUIRE A GEOHAZARD REPORT PROVIDED A GEOTECHNICAL REPORT INDICATES THAT NO LIQUEFACTION POTENTIAL EXISTS.

ARCHITECT OF RECORD TO DETERMINE IF SPECIFIC SITE IS IN GEOLOGIC HAZARD ZONE. GEOHAZARD REPORT REQUIREMENTS PER DSA IR A-4.

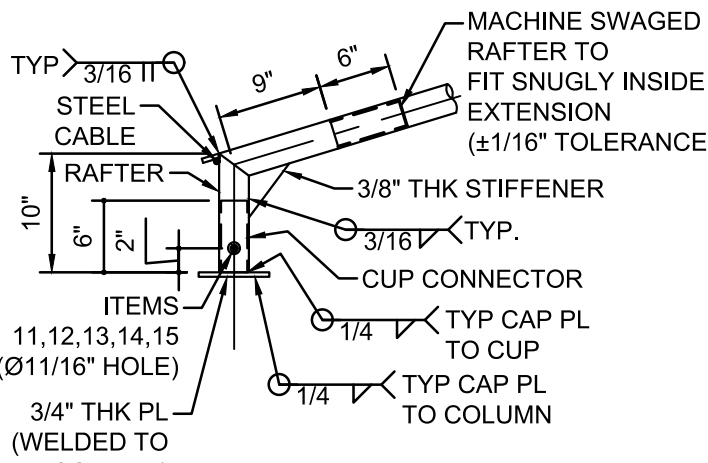
PC OPTIONS SHALL NOT INCLUDE LIQUEFIABLE SOIL (EXCEPTION: OPEN FABRIC SHADE STRUCTURES 1,600 SQUARE FEET OR LESS COMPLYING WITH REQUIREMENTS OF IR A-4 SECTION 3.1.1). IF STRUCTURE IS LOCATED IN AN AREA WITH LIQUEFIABLE SOIL OR SITE CLASS F, OVER-THE-COUNTER SUBMITTAL IS NOT ALLOWED AND REGULAR PROJECT SUBMITTAL IS REQUIRED. IF SITE IS NOT IN A MAPPED LIQUEFACTION HAZARD ZONE, IT MAY BE PRESUMED THAT NO LIQUEFACTION HAZARD EXISTS ON THAT SITE UNLESS A SITE-SPECIFIC GEOTECHNICAL REPORT IDENTIFIES SUCH HAZARD.

MINIMUM FOUNDATION SETBACK LIMIT IN ADJACENT SLOPE: THE DEPTH OF REQUIRED PIER EMBEDMENT SHALL START FROM AN ELEVATION THAT CORRESPONDS WITH A HORIZONTAL CLEAR DISTANCE OF 17'-6" THAT INTERSECT WITH THE SLOPE (DAYLIGHTING). IF SETBACK LIMITS ARE SMALLER THAN CBC REQUIRES, A SITE-SPECIFIC SOILS REPORT IS REQUIRED.

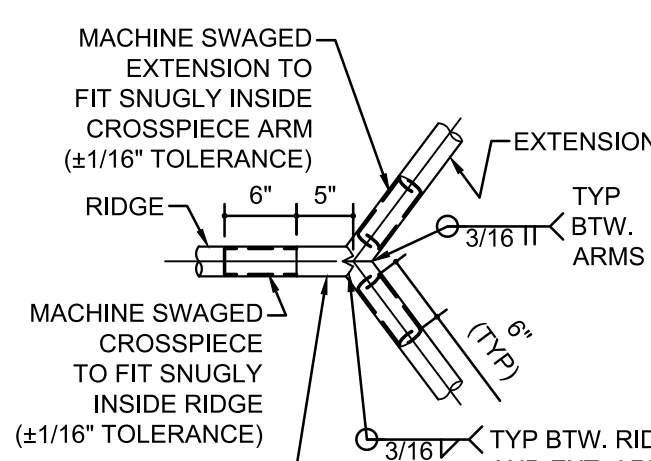
MINIMUM CLASS 2 PROJECT INSPECTOR REQUIRED.



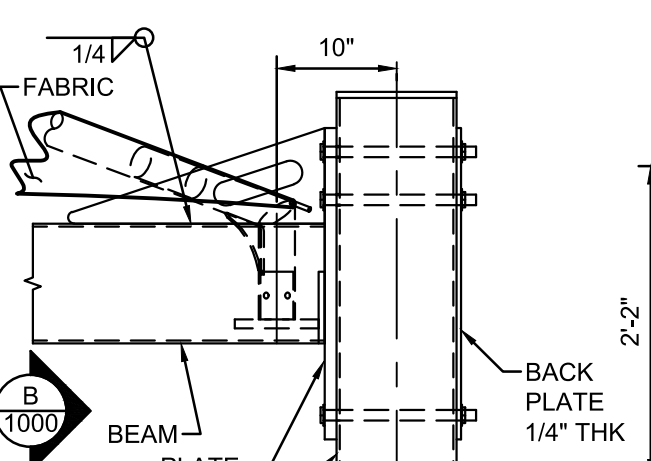
DETAIL 1  
REFER TO TOP VIEW



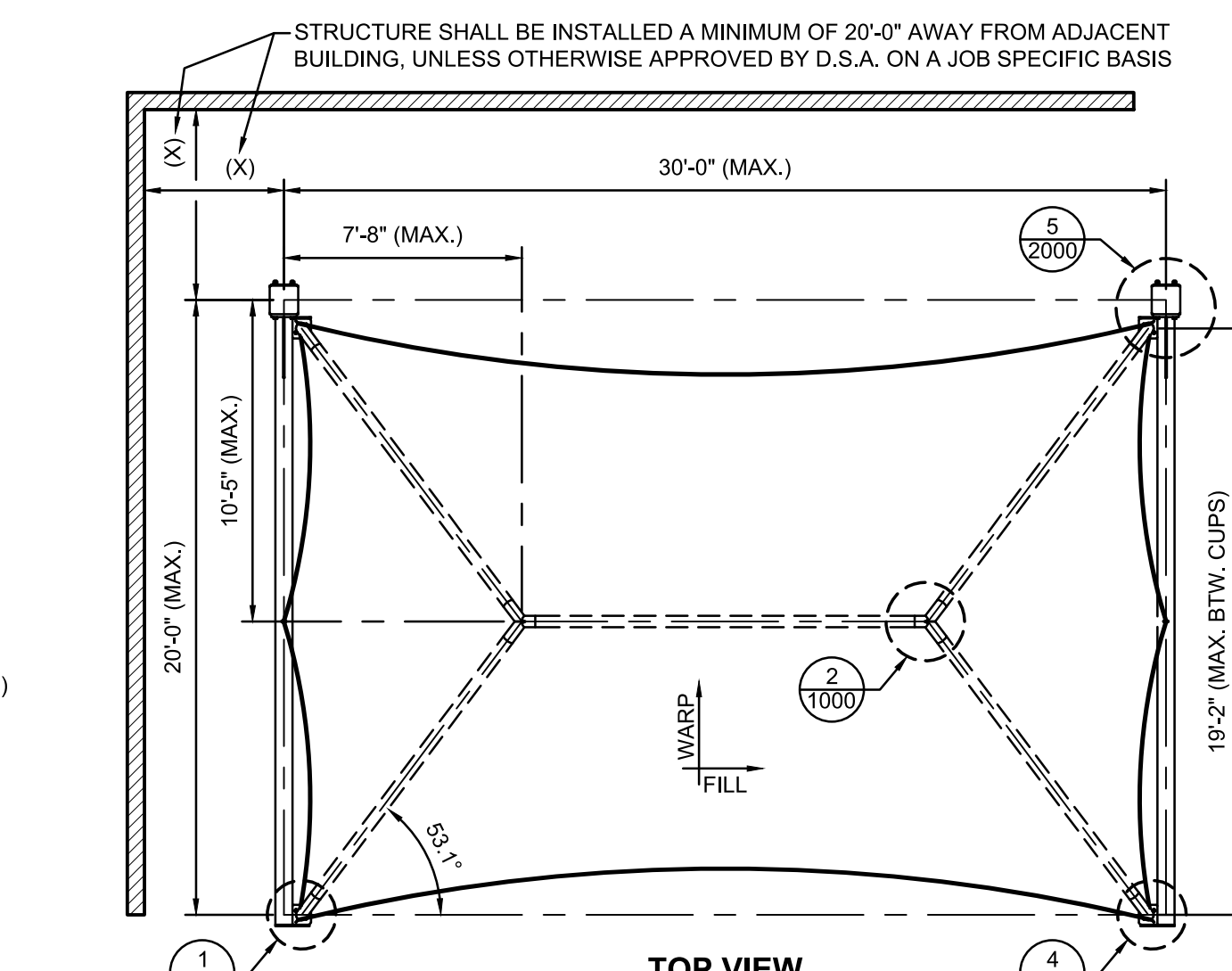
VIEW-A  
REFER TO DETAIL-1



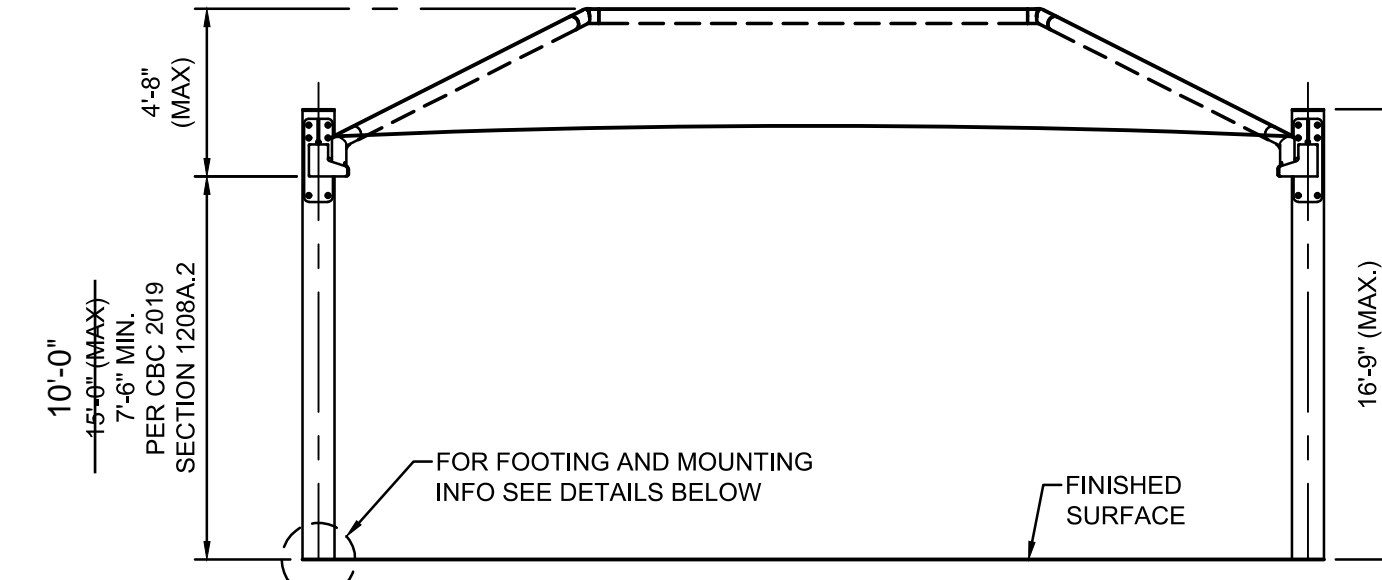
DETAIL-2  
REFER TO TOP VIEW



DETAIL-3  
REFER TO SIDE VIEW

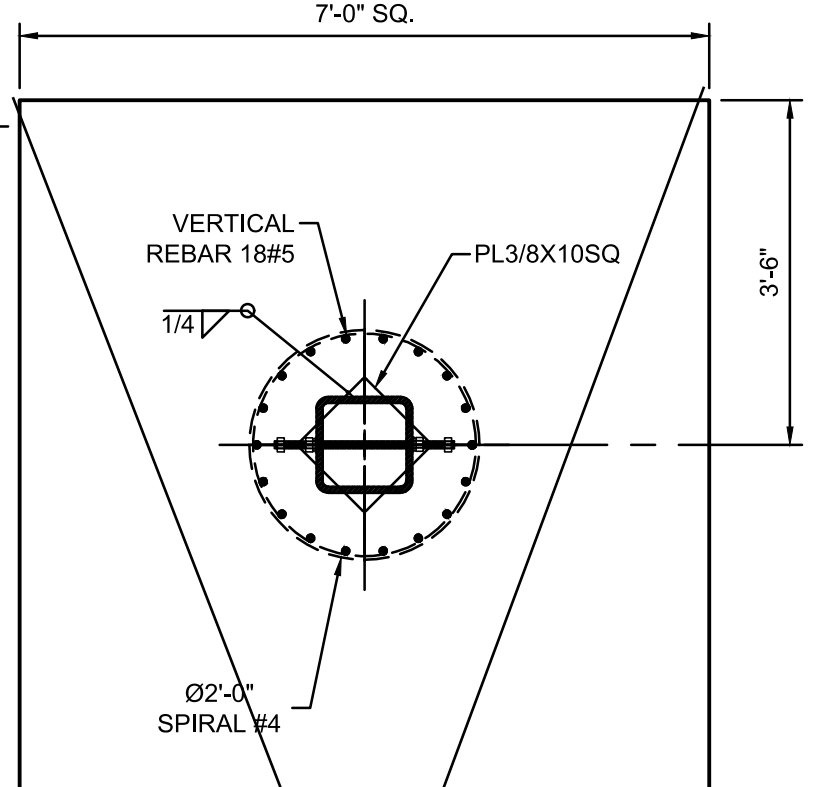


TOP VIEW  
(SCHEMATIC VIEW ONLY)



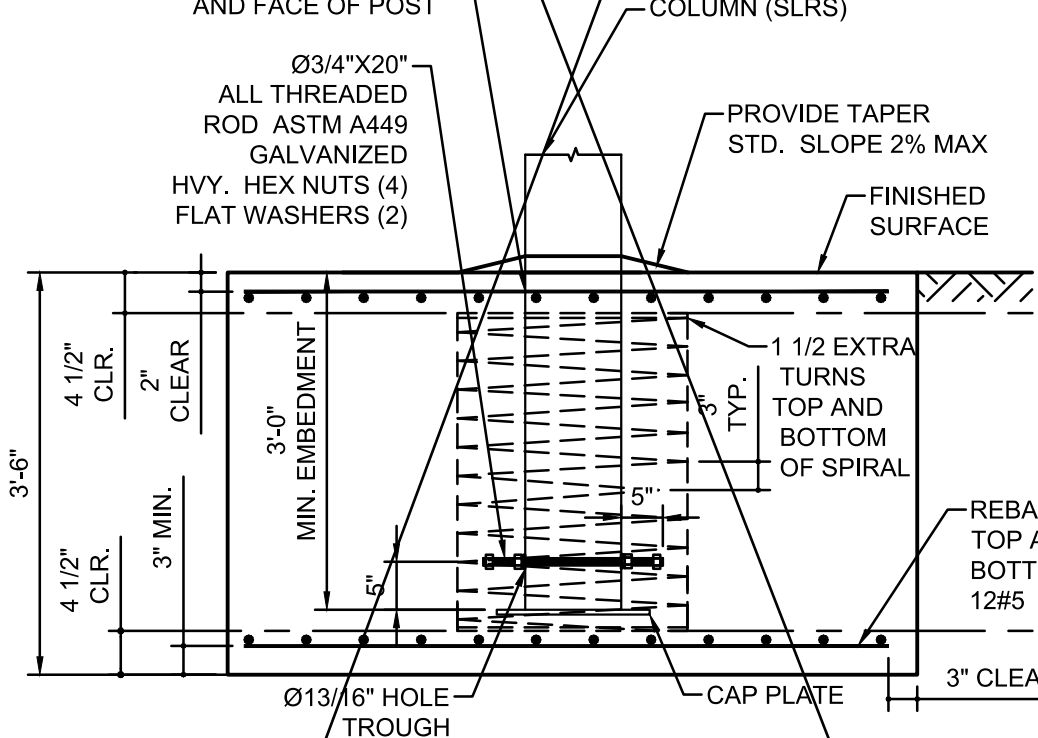
FRONT VIEW  
(SCHEMATIC VIEW ONLY)

CODE ANALYSIS					
BUILDING	OCCUPANCY	CONST. TYPE	AREA (SQ. FT.)	OCCUPANT LOAD FACTOR	OCCUPANT LOAD
SHADE STRUCTURE	A-2	V-B	312.5	15	21

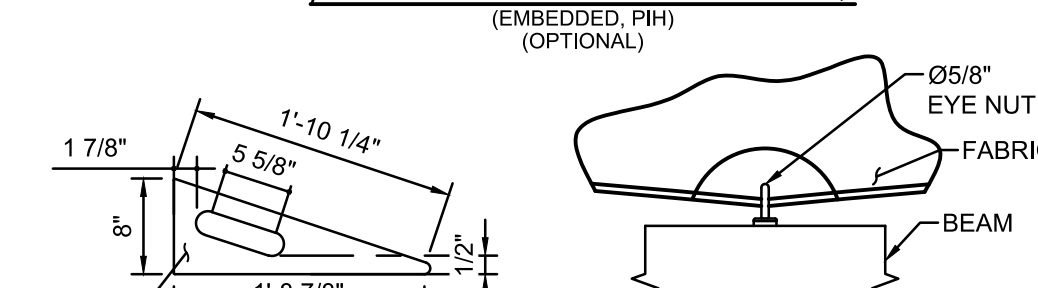


TOP VIEW

CUT TOP REBAR AT POST, TYP. EACH FACE. MAXIMUM 3" BETWEEN REBAR END AND FACE OF POST

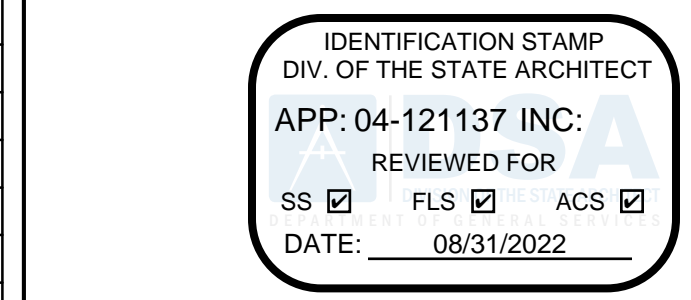


ALTERNATE SPREAD FOOTING  
(EMBEDDED, PH) (OPTIONAL)



GUSSET PLATE DETAIL  
REFER TO DETAIL-3

LIST OF MATERIALS		
ITEM	QTY	DESCRIPTION
1	2	COLUMN
2A	1	BEAM LEFT
2B	1	BEAM RIGHT
3	4	CUP CONNECTOR (6" LG)
4	4	RAFTER (GALVANIZED STEEL TUBE)
5	4	EXTENSION (GALVANIZED STEEL TUBE)
6	2	CROSSPIECE (GALVANIZED STEEL TUBE)
7	1	RIDGE
8	1	FABRIC TOP
9	1	Ø3/8" CABLE
10	4	Ø3/8" CABLE CLAMP
11	4	Ø5/8"-11NC x 6" HEX BOLT
12	4	Ø5/8"-11NC HEX NUT
13	8	Ø5/8" FLAT WASHER
14	8	Ø5/8" FLAT WASHER
15	4	Ø5/8" SPLIT LOCK WASHER
16	12	Ø1"-8NC x 13" HEX BOLT
17	12	Ø1"-8NC HEX NUT
18	12	Ø1" SPLIT LOCK WASHER
19	24	Ø1" FLAT WASHER



THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.



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:

Grossmont Union High School District

PROJECT NAME:

Grossmont Child Care Center

LOCATION:

1100 Murray Ave.  
El Cajon, CA 92020

MODEL NUMBER:

DSA2022030-19



STRUCTURE TYPE:  
FULL CANTILEVER HIP  
SINGLE - DSA

SIZE: MAXIMUM  
20' x 30' x 15' MAX.

SCALE : NONE

DRAWING SIZE: D

PRE-CHECK (PC)  
DOCUMENT  
Code : 2019 CBC

A separate project application for construction is required.

Eng. By : JO 06/26/20

Design By : JO 06/26/20

Approved By : JO 06/26/20

DRAWING DESCRIPTION:

PRODUCT INFORMATION

DWG. DSA2022030-19

SHEET 9.1-1000

REV. NC









---

**GEOTECHNICAL INVESTIGATION  
CHILD DEVELOPMENT CENTER  
SHADE STRUCTURE PROJECT  
GROSSMONT HIGH SCHOOL  
1100 MURRAY DRIVE  
EL CAJON, CALIFORNIA**

**Prepared For** **GROSSMONT UNION HIGH SCHOOL  
DISTRICT  
1100 MURRAY DRIVE  
EL CAJON, CA 91920**

**Prepared By** **LEIGHTON CONSULTING, INC.  
3934 MURPHY CANYON RD, STE B-205  
SAN DIEGO, CA 92123**

Project Number 12429.034

Issue Date June 28, 2023

---



Leighton Consulting, Inc.

A Leighton Group Company

June 28, 2023

Project No. 12429.034

Grossmont Union High School District  
1100 Murray Drive  
El Cajon, California 92020

Attention: Ms. Dena Johnson, Project Manager

**Subject: Geotechnical Investigation  
Child Development Center Shade Structure Project  
Grossmont High School  
1100 Murray Drive  
El Cajon, California**

In accordance with your request and authorization, we have conducted a geotechnical investigation for the proposed Shade Structure Project at the Child Development Center at Grossmont High School located in El Cajon, San Diego County, California. Based on the results of our study, it is our opinion that the proposed site improvements are feasible provided the geotechnical recommendations contained in this report are implemented during design and construction. This report provides a summary of the current investigation and general geotechnical conclusions and recommendations for the project.

If you have any questions regarding our report, please do not hesitate to contact this office. We appreciate this opportunity to be of service.

Respectfully submitted,  
LEIGHTON CONSULTING, INC.

Roy Butz, CEG 2752  
Senior Engineering Geologist  
Ext: 8489, [rbutz@leightongroup.com](mailto:rbutz@leightongroup.com)



Nicholas Tracy, GE 3058  
Associate Engineer  
Ext: 8499, [ntracy@leightongroup.com](mailto:ntracy@leightongroup.com)



Distribution: Client via email

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 PURPOSE AND SCOPE .....	1
1.2 SITE LOCATION AND DESCRIPTION.....	2
1.3 PROPOSED DEVELOPMENT .....	3
<b>2.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING .....</b>	<b>4</b>
2.1 SITE INVESTIGATION .....	4
2.2 LABORATORY TESTING .....	4
<b>3.0 SUMMARY OF GEOLOGIC CONDITIONS .....</b>	<b>5</b>
3.1 GEOLOGIC AND TECTONIC SETTING.....	5
3.2 LOCAL GEOLOGIC SETTING .....	5
3.2.1 Documented Artificial Fill (Afu) .....	6
3.2.2 Pomerado Conglomerate (Tp).....	6
3.2.3 Mission Valley Formation (Tmv) .....	6
3.2.4 Stadium Conglomerate (Tst) .....	7
3.3 GEOLOGIC STRUCTURE .....	7
3.4 LANDSLIDES.....	7
3.5 SLOPE STABILITY.....	8
3.6 EXPANSIVE SOILS.....	8
3.7 COMPRESSIBLE SOILS .....	8
3.8 EXCAVATION CHARACTERISTICS.....	8
3.9 SOIL CORROSIVITY .....	9
3.10 SURFACE AND GROUNDWATER.....	9
3.11 FLOOD HAZARD .....	9
3.12 EXCEPTIONAL GEOLOGIC CONDITIONS.....	9
3.12.1 Hazardous Materials .....	10
3.12.2 Regional Subsidence .....	10
3.12.3 Non-Tectonic Faulting .....	10
3.12.4 Volcanic Eruption .....	10
3.12.5 Asbestos .....	10
3.12.6 Radon-222 Gas.....	10
<b>4.0 FAULTING AND SEISMICITY .....</b>	<b>11</b>
4.1 FAULTING.....	11
4.1.1 Surface Rupture .....	12
4.2 HISTORICAL SEISMICITY .....	12
4.3 SEISMICITY .....	12
4.3.1 Site Class.....	13
4.3.2 Building Code Mapped Spectral Acceleration Parameters.....	13
4.4 SECONDARY SEISMIC HAZARDS .....	14
4.4.1 Liquefaction Potential .....	14
4.4.2 Seismically-Induced Settlement.....	14

4.4.3	Surface Manifestation of Liquefaction and Dynamic Settlement .....	14
4.4.4	Lateral Spreading or Flow Failure.....	14
4.4.5	Tsunamis or Seiches.....	15
<b>5.0</b>	<b>CONCLUSIONS .....</b>	<b>16</b>
<b>6.0</b>	<b>RECOMMENDATIONS .....</b>	<b>18</b>
6.1	EARTHWORK .....	18
6.1.1	Site Preparation .....	18
6.1.2	Excavations and Oversize Material .....	18
6.1.3	Remedial Grading .....	19
6.1.4	Engineered Fill .....	20
6.1.5	Import Soils .....	20
6.1.6	Expansive Soils and Selective Grading .....	21
6.1.7	Controlled Low-Strength Material .....	21
6.2	REMEDIAL MEASURES FOR DISTRESSED CONCRETE .....	21
6.3	TEMPORARY EXCAVATIONS.....	22
6.4	FOUNDATION DESIGN .....	22
6.4.1	Pile Installation .....	23
6.4.2	Foundation Setback .....	24
6.5	GEOCHEMICAL CONSIDERATIONS .....	25
6.6	CONCRETE FLATWORK .....	25
6.7	CONSTRUCTION OBSERVATION .....	26
6.8	PLAN REVIEW.....	26
<b>7.0</b>	<b>LIMITATIONS.....</b>	<b>27</b>

## LIST OF TABLES

### TABLES

TABLE 1. CBC MAPPED SPECTRAL ACCELERATION PARAMETERS .....	13
TABLE 2. MAXIMUM SLOPE RATIOS .....	22
TABLE 3. MINIMUM FOUNDATION SETBACK FROM SLOPE FACES .....	24

### FIGURES

FIGURE 1 - SITE LOCATION MAP - REAR OF TEXT
FIGURE 2 - GEOTECHNICAL MAP - REAR OF TEXT
FIGURE 3 - REGIONAL FAULT MAP - REAR OF TEXT
FIGURE 4 - GEOLOGIC MAP - REAR OF TEXT
FIGURE 5 - GEOLOGIC CROSS-SECTIONS A-A' AND B-B' - REAR OF TEXT
FIGURE 6 - FLOOD HAZARD MAP - REAR OF TEXT
FIGURE 7 - DAM INUNDATION HAZARD ZONE MAP - REAR OF TEXT

## **APPENDICES**

APPENDIX A - REFERENCES

APPENDIX B - EXPLORATION LOGS

APPENDIX C - LABORATORY TESTING PROCEDURES AND TEST RESULTS

APPENDIX D - SEISMIC HAZARD ANALYSIS

APPENDIX E - GENERAL EARTHWORK AND GRADING SPECIFICATIONS



# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

## Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply this report for any purpose or project except the one originally contemplated.*

## Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an

assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by:* the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

## Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

## A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

### Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

### Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time* to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

### Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help

others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

### Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

### Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold-prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical-engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

### Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910

Telephone: 301/565-2733 Facsimile: 301/589-2017

e-mail: [info@geoprofessional.org](mailto:info@geoprofessional.org) [www.geoprofessional.org](http://www.geoprofessional.org)

Copyright 2015 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, or its contents, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document as a complement to or as an element of a geotechnical-engineering report. Any other firm, individual, or other entity that so uses this document without being a GBA member could be committing negligent or intentional (fraudulent) misrepresentation.

## 1.0 INTRODUCTION

We recommend that all individuals utilizing this report read the preceding information sheet prepared by Geoprofessional Business Association (GBA) and the Limitations within Section 7.0 of this report.

### 1.1 Purpose and Scope

This report presents the results of our geotechnical investigation for the proposed Child Development Center (CDC) Shade Structure Project at Grossmont High School located in El Cajon, San Diego County, California (Figure 1). We have performed a geotechnical investigation to identify and evaluate the geologic hazards and significant geotechnical conditions present at the site in order to provide geotechnical recommendations for the proposed site improvements. Our scope of services included:

- Review of available pertinent, published and unpublished geotechnical literature and maps. References cited are listed in Appendix A;
- Field reconnaissance of the existing on-site geotechnical conditions;
- Subsurface exploration consisting of the excavation, logging, and sampling of three hand auger borings and four dynamic cone penetrometer (DCP) soundings. The exploration logs are presented in Appendix B and their approximate locations are shown on Figures 2;
- Laboratory testing of representative soil samples obtained from the subsurface exploration program. Results of these tests are presented on the boring logs and in Appendix C;
- Assessment of geologic hazards;
- Development of seismic design parameters based on the 2022 California Building Code (CBC);
- Compilation and analysis of the geotechnical data obtained from the field investigation and laboratory testing; and
- Preparation of this report presenting our findings, conclusions, and geotechnical recommendations with respect to the proposed geotechnical design, site grading and general construction considerations.

## 1.2 Site Location and Description

Grossmont High School is located at 1100 Murray Drive in El Cajon, California. Based on our review of historical aerial photographs, topographic maps, and available background information, Grossmont High School was graded and constructed sometime in the middle to late 1950's. Specifically, the CDC is located on the southeast portion of the school's campus. Importantly, it should be noted that Leighton (Leighton, 2012) provided geotechnical observation and testing services during grading and construction of the CDC. In general, the site is bounded by Dennstedt Place and an asphalt paved parking lot followed by residential developments to the north, building 800 and an asphalt paved parking lot to the west, and a descending slope followed by Murray Drive to the east and south.

Site topography within the vicinity of the proposed site improvements is nearly level with surface elevations gently sloping from the west to the east, ranging from approximately 666 to 668.5 feet above mean sea level (msl). The site lies above and directly adjacent to an approximately 55-foot high descending natural slope to the southwest and a natural slope over a cut slope which descends to Murray Drive on the south and east. The existing slopes range in inclination from about 1.5H:1V (horizontal to vertical) in the natural area to about 0.5H:1V in the cut slope above Murray Drive.

Currently, the project site is occupied by the CDC, which is comprised of Building P and an outdoor patio area consisting of concrete hardscape features, artificial turf and rubber mat areas, existing shade structures, a site retaining wall, and underground utilities. Of particular importance is the distressed concrete flatwork, located directly adjacent to the site retaining wall, and the underlying drainage improvements, located at a depth of approximately 2 feet below the existing ground surface (bgs). Cracks up to half an inch wide were measured between the concrete and the edge of the retaining wall. With respect to the drainage improvements, the 6-inch area drain, located adjacent to the southeast corner of Building P, was observed to be clogged and not functioning properly due to the presence of standing water. Importantly, it should be noted that the underlying 6-inch and 8-inch subdrains parallel the areas of distress. It should also be noted that structural distress was not observed within Building P. The existing site improvements are shown on the base map utilized for our Geotechnical Map (Figure 2).

Generalized Site Latitude and Longitude

32.7814 ° N

116.9846 ° W

### **1.3 Proposed Development**

Based on our discussions with you, we understand that the project will consist of the design and construction of a new shade structure that will be added to the existing CDC at Grossmont High School. The limits of the proposed shade structure are shown on our Geotechnical Map (Figure 2). It is our understanding that the new shade structure will be founded on drilled pile foundations. In addition, the project may include new concrete hardscape to replace the existing distressed areas that appear to be sloping away from the building due to potential settlement. Once project grading and foundation plans are available, they should be sent over to our office so that we can verify that the recommendations provided in our report are still valid with respect to the proposed improvements.

## **2.0 SUBSURFACE EXPLORATION AND LABORATORY TESTING**

### **2.1 Site Investigation**

Our subsurface exploration, performed on June 3, 2023, consisted of excavating three hand auger borings (HA-1 through HA-3) and advancing four DCP soundings (DCP-1 through DCP-4) to depths between approximately 1 to 8.5 feet bgs. The hand auger borings were excavated using conventional hand tools and the DCP soundings were advanced with a Triggs Technologies Wildcat Dynamic Cone Penetrometer using a 35-lb hammer. The purpose of our subsurface exploration was to evaluate the underlying stratigraphy, physical characteristics, and specific engineering properties of the soils located within the area of the proposed improvements.

During the exploration operations, a geologist from our firm prepared geologic logs and collected bulk samples for laboratory testing and evaluation. After logging and field testing, the hand auger borings and DCP soundings were backfilled with soil cuttings and capped with quick set concrete. The exploration logs are presented in Appendix B and their approximate locations are shown on Figure 2.

### **2.2 Laboratory Testing**

Laboratory testing performed on representative soil samples obtained during the subsurface exploration included expansion index, direct shear, maximum density, optimum moisture content, and geochemical analysis for corrosion. A discussion of the laboratory tests performed and a summary of the laboratory test results are presented in Appendix C.



### **3.0 SUMMARY OF GEOLOGIC CONDITIONS**

#### **3.1 Geologic and Tectonic Setting**

The site is located within the coastal subprovince of the Peninsular Ranges Geomorphic Province, near the western edge of the southern California batholith. Throughout the last 54 million years, the area known as the “San Diego Embayment” has gone through several episodes of marine inundation and subsequent marine regression, resulting in the deposition of a thick sequence of marine and nonmarine sedimentary rocks on the basement rock of the Southern California batholith. The site is located along the eastern margin of the San Diego Embayment.

The Peninsular Ranges are traversed by several major Holocene-active faults (Figure 3). The Whittier-Elsinore, San Jacinto, and the San Andreas faults are major Holocene-active fault systems located northeast of the site and the Rose Canyon, Newport-Inglewood (offshore), Coronado Bank, and San Diego Trough are Holocene-active faults located to the west-southwest. Major tectonic activity associated with these and other faults within this regional tectonic framework is right-lateral strike-slip movement. These faults, as well as other faults in the region, have the potential for generating strong ground motions at the project site. Further discussion of faulting relative to the site is provided in the Faulting and Seismicity section of this report.

Gradual emergence of the region from the sea occurred in Pleistocene time, and numerous wave-cut platforms, most of which were covered by relatively thin marine and nonmarine terrace deposits, formed as the sea receded from the land. Accelerated fluvial erosion during periods of heavy rainfall, coupled with the lowering of the base sea level during Quaternary times, resulted in the rolling hills, mesas, and deeply incised canyons which characterize the landforms we see in the general site area today. The regional geologic setting is depicted on Figure 4.

#### **3.2 Local Geologic Setting**

Based on our subsurface exploration and review of pertinent geologic literature and maps (Appendix A), the geologic units underlying the site consist of surficial documented artificial fill materials overlying the Tertiary-aged Pomerado Conglomerate and Tertiary-aged Mission Valley Formation. At depth, the Tertiary-aged Stadium Conglomerate underlies the entire site. The approximate areal distribution of the geologic units is depicted on the Geotechnical Map (Figure 2).

The approximate vertical distribution of geologic units underlying the site are shown on the geologic cross-sections provided in Cross-Section A-A' and Cross-Section B-B' (Figure 5).

### 3.2.1 Documented Artificial Fill (Afu)

Based on our subsurface exploration, documented fill soils were encountered in all of our geotechnical exploration locations with thicknesses varying between approximately 1 to 8½ feet bgs. As encountered, the fill soils generally consist of loose to medium dense, brown, slightly moist to moist, silty and clayey sands with gravel and trace amounts of cobble. The cobble located within the fill materials is anticipated to be 6- to 8-inches in diameter with the potential of isolated cobbles up to 1-foot in diameter. It should be noted that the concrete encountered in hand auger borings HA-2 through HA-4 was measured to be 5 inches thick with 1 to 2 inches of pea gravel and no underlying base. As mentioned previously, Leighton (Leighton, 2012) provided geotechnical observation and testing services of these fill soils at the time of grading.

### 3.2.2 Pomerado Conglomerate (Tp)

Although not encountered, formational material consisting of the Tertiary-aged Pomerado Conglomerate underlies the documented fill. Based on our experience, the Pomerado Conglomerate generally consists of very dense, yellowish brown, moist, clayey gravel conglomerate. In addition, it should be noted that well-rounded gravel and cobble typically comprise between approximately 30 and 60 percent of the conglomerate mass, respectively. The cobbles are typically 3 to 6 inches in maximum dimension; however, larger cobbles and boulders should be anticipated.

### 3.2.3 Mission Valley Formation (Tmv)

Although not encountered, formational material consisting of the Tertiary-aged Mission Valley Formation underlies the Pomerado Conglomerate at the project site. Based on our experience, the Mission Valley Formation generally consists of interbedded layers of light brown to grayish brown, moist, dense to very dense, moderately-cemented, fine-grained, clayey sandstone; gray, stiff to hard, moist, micaceous, sandy siltstone; and gray, very stiff, moist, oxidized, sandy lean claystone. In addition, minor isolated interbedded layers of gravel and cobble are located within the Mission Valley Formation.



#### 3.2.4 Stadium Conglomerate (Tst)

Although not encountered, the Tertiary-aged Stadium Conglomerate underlies the Mission Valley Formation. Based on our experience, the Stadium Conglomerate generally consists of very dense, yellowish brown, moist, clayey gravel conglomerate. In addition, it should be noted that well-rounded gravel and cobble typically comprise between approximately 30 and 60 percent of the conglomerate mass, respectively. The cobbles are typically 3 to 6 inches in maximum dimension; however, larger cobbles and boulders should be anticipated.

### 3.3 **Geologic Structure**

Based on our field observations, subsurface exploration, and our review of site topographic and geologic maps, the site is underlain by favorably oriented geologic structure consisting of a thin veneer of artificial fill overlying generally massive, near horizontal, very dense to hard, Tertiary-aged formational units identified as the Pomerado Conglomerate, Mission Valley Formation and the Stadium Conglomerate.

### 3.4 **Landslides**

In areas of topographic expression, several formations within the San Diego region are particularly prone to landsliding. These formations generally have high clay content and mobilize when they become saturated with water. Other factors, such as steeply dipping bedding that project out of the face of the slope and/or the presence of fracture planes, will also increase the potential for landsliding.

No landslides or indications of deep-seated landsliding were indicated at the site during our field exploration or our review of available geologic literature, topographic maps, and historical aerial photographs (Appendix A). However, it should be noted that several mapped landslide deposits which originated from within the Tertiary-aged Friars Formation are located approximately 1,000 feet east of the site (Figure 4). Nevertheless, the potential for significant landslides or large-scale slope instability at the site is considered low due to the lack of slopes and gentle existing topographic relief. In addition, it should be noted that the site is not currently within a mapped California Geologic Survey (CGS) seismic hazard zone. Therefore, the potential for significant landslides or large-scale slope instability at the site is considered low.

### **3.5 Slope Stability**

Site topography within the limits of the proposed development is nearly level with surface elevations ranging from approximately 666 to 668.5 feet msl. However, the site is bounded by a descending slope to the east and south. Specifically, the site lies above and adjacent to an approximately 55-foot high natural slope on the southwest and a natural slope over a cut slope which descends to Murray Drive on the south and east. The existing slopes range in inclination from about 1.5H:1V (horizontal to vertical) in the natural area to about 0.5H:1V in the cut slope above Murray Drive.

Based on previous slope stability analyses performed by Kleinfelder (Kleinfelder, 2010) and Leighton (Leighton, 2011), the hazard posed by static or seismic slope instability at the site is generally considered to be low. In addition, during our recent geotechnical investigation, we noted no indication of slope instability, such as block-type failures, sloughing, or flow type failures associated with poor drainage. Therefore, the potential for slope instability at the site is low.

### **3.6 Expansive Soils**

Expansion index testing on one representative soil sample taken from hand-auger boring HA-3 indicates that the onsite soil materials have a very low (12) potential for expansion. However, higher expansive soils may be encountered during the grading of the proposed site improvements. Expansive soils are not anticipated to significantly impact the proposed site improvements.

### **3.7 Compressible Soils**

Based on the results of our subsurface exploration, the existing documented fill materials located at the project site are considered compressible. Recommendations for treatment of these materials during proposed remediation are provided later in this report.

### **3.8 Excavation Characteristics**

Excavations of the onsite fill materials may generally be accomplished with conventional heavy-duty earthwork equipment. However, local heavy ripping, breaking, or specialty drilling techniques may be required within the underlying very dense formational materials which contain an abundance of cobble.

### **3.9 Soil Corrosivity**

A screening of the onsite materials for corrosivity was performed to evaluate their potential effect on concrete and ferrous metals. The corrosion potential was evaluated using the results of laboratory testing on one representative soil sample obtained during our subsurface evaluation.

Laboratory testing was performed to evaluate pH, minimum electrical resistivity, and chloride and soluble sulfate content. The sample tested had a measured pH of 7.42 and a measured minimum electrical resistivity of 2,200 ohm-cm. The test results also indicated that the sample had a chloride content of 80 parts per million (ppm) and a soluble sulfate content of less than 150 ppm.

### **3.10 Surface and Groundwater**

No indication of surface water or evidence of surface water ponding was encountered during our limited geotechnical investigation at the site. However, surface water may drain as sheet flow across the site during rainy periods.

Groundwater was not encountered during our subsurface exploration at the site. It should be noted that groundwater levels may fluctuate with seasonal variations and irrigation and local perched groundwater conditions may exist within cemented layers of the Pomerado Conglomerate, Mission Valley Formation and Stadium Conglomerate. Nevertheless, based on the above information, we do not anticipate groundwater will be a constraint to the construction of the proposed improvements.

### **3.11 Flood Hazard**

According to a Federal Emergency Management Agency (FEMA) flood insurance rate map (FEMA, 2012); the site is not located within a flood zone (Figure 6). In addition, based on our review of dam inundation and topographic maps, the site is not located within a dam inundation area (Figure 7).

### **3.12 Exceptional Geologic Conditions**

Exceptional geologic items are items that are present within the State of California, and occur on a site by site basis. We have addressed the presence or non-presence of these items in the sections below.

### 3.12.1 Hazardous Materials

Our scope of work has not included evaluation of the site for hazardous materials in the subsurface and we are not aware of any such reports that pertain to the site.

### 3.12.2 Regional Subsidence

Due to the lack of production groundwater wells in the area and the very dense to hard nature of the underlying Tertiary-aged formational units, the possibility of regional subsidence is considered to be nil.

### 3.12.3 Non-Tectonic Faulting

Surface expressions of differential settlement, such as ground fissures, can develop in areas affected by ground water withdrawal or banking activities, including geothermal production. The site location is not within an area affected by differential settlement caused by non-tectonic sources.

### 3.12.4 Volcanic Eruption

The proposed site is not located within or near a mapped area of potential volcanic hazards (Miller, C.D., 1989). The nearest volcanic activity is located in the Salton Sea area of southern California. Therefore, volcanic activity is not considered a hazard at the site.

### 3.12.5 Asbestos

Due to the lack of proximal sources of serpentinitic or ultramafic rock bodies, naturally-occurring asbestos is not considered a hazard at the site.

### 3.12.6 Radon-222 Gas

Historically, Radon-222 gas has not typically been recognized as an environmental consideration in San Diego County. In particular, the site area is not mapped as containing organic rich marine shales commonly characterized to potentially contain Radon-222 gas. Therefore, based on our review of the referenced literature, and our site exploration, the potential for the occurrence of Radon-222 gas at the site is considered low.

## 4.0 FAULTING AND SEISMICITY

### 4.1 Faulting

The California State Mining and Geology Board (CSMGB) has defined a Holocene-active fault as a fault which has had surface displacement within Holocene time (about the last 11,700 years). In addition, a pre-Holocene fault is a fault that has not moved in the past 11,700 years, and does not meet the criteria of “Holocene-active fault” as defined in the Alquist-Priolo Act and CSMGB regulations.

These definitions are used in delineating Special Studies Zones as mandated by the Alquist-Priolo Geologic Hazards Zones Act of 1972. The intent of this act is to assure that unwise urban development does not occur across the traces of Holocene-active faults. As background, Special Publication (SP) 42 was provided for guidance with regard to informing reviewers and practitioners on the locations of the fault rupture hazard zones in California, and was subsequently revised several times. The most recent revision of the document was completed in 2018 and resulted in a significant change from previous versions, as it now provides guidelines (previously included as supplements to SP 42) for both reviewers and practitioners working in Earthquake Fault Zones (EFZs).

The primary seismic risk to the San Diego metropolitan area is the Rose Canyon fault zone located approximately 11.5 miles west of the site. The Rose Canyon fault zone consists predominantly of right-lateral strike-slip faults that extend south-southeast bisecting the San Diego metropolitan area (Figure 3). Various fault strands display strike-slip, normal, oblique, or reverse components of displacement. The Rose Canyon fault zone extends offshore at La Jolla and continues north-northwest subparallel to the coastline. The offshore segments are poorly constrained regarding location and character. South of downtown, the fault zone splits into several splays that underlie San Diego Bay, Coronado, and the ocean floor south of Coronado (Treiman, 1993; Kennedy and Clarke, 1999). Portions of the fault zone in the Mount Soledad, Rose Canyon, and downtown San Diego areas have been designated by the State of California (CGS, 2000 and 2003) as being Earthquake Fault Zones.

Our review of available geologic literature (Appendix A) indicates that there are no known Holocene-active faults transecting, or projecting toward the site.

The site is not located within any State Mapped Earthquake Fault Zones or County of San Diego mapped fault zones. The nearest Holocene-active fault is the Rose Canyon fault zone located approximately 11.5 miles west of the site (Figure 3).

#### 4.1.1 Surface Rupture

As previously discussed, the site is not underlain by a known Holocene-active or pre-Holocene fault. Therefore, the potential for ground rupture due to faulting at the site is considered low. Ground lurching is defined as movement of low density materials on a bluff, steep slope, or embankment due to earthquake shaking. Since the site is relatively flat and removed from any over-steepened slopes, lurching or cracking of the ground surface as a result of nearby or distant seismic events is unlikely.

#### 4.2 **Historical Seismicity**

Historically, the San Diego region has been spared major destructive earthquakes. The most recent earthquake on the Rose Canyon fault in San Diego occurred after A.D. 1523 but before the Spanish arrived in 1769. Studies by Rockwell and Murbach (1999) indicate that the earthquake occurred at A.D.  $1650 \pm 125$ . Two additional earthquakes, the 1800 M6.5 and 1862 M5.9, may have also occurred in the Rose Canyon fault zone. However, no direct evidence of ground rupture within the Rose Canyon fault zone for those events was recorded.

The site location with respect to significant past earthquakes ( $>M5.0$ ) is shown on the Historical Seismicity Map in Appendix D. The historic seismicity for the site has been tabulated utilizing the computer software EQSEARCH (Blake, 2023). The results are presented in Appendix D. The results indicate that the maximum historical site acceleration from 1800 to present has been estimated to be 0.094g.

#### 4.3 **Seismicity**

The site can be considered to lie within a seismically active region, as can all of Southern California. Specifically, the Rose Canyon fault zone located approximately 11.5 miles west of the site is the 'Holocene-active' fault considered having the most significant effect at the site from a design standpoint (USGS, 2008).

#### 4.3.1 Site Class

The site is underlain at shallow depth by the Tertiary-aged Pomerado Conglomerate and the Tertiary-aged Mission Valley Formation, followed by the Tertiary-aged Stadium Conglomerate at depth. Utilizing 2022 California Building Code (CBC procedures), our experience on similar sites, regional shear wave velocity mapping, and the results of our subsurface exploration, we have characterized the site soil profile to be Site Class C.

#### 4.3.2 Building Code Mapped Spectral Acceleration Parameters

The effect of seismic shaking may be mitigated by adhering to the California Building Code and state-of-the-art seismic design practices of the Structural Engineers Association of California. Provided in Table 1 are the spectral acceleration parameters for the project determined in accordance with the 2022 CBC (CBSC, 2022) and SEAOC/OSHPD Seismic Design Maps Web Application (2022).

**Table 1. CBC Mapped Spectral Acceleration Parameters**

Site Class	C		
Site Coefficients	$F_a$	=	1.2
	$F_v$	=	1.5
Mapped MCE Spectral Accelerations	$S_s$	=	0.775g
	$S_1$	=	0.284g
Site Modified MCE Spectral Accelerations	$S_{MS}$	=	0.93g
	$S_{M1}$	=	0.425g
Design Spectral Accelerations	$S_{DS}$	=	0.62g
	$S_{D1}$	=	0.284g

Utilizing ASCE Standard 7-16, in accordance with Section 11.8, the following additional parameters for the peak horizontal ground acceleration are associated with the Geometric Mean Maximum Considered Earthquake ( $MCE_G$ ). The mapped  $MCE_G$  peak ground acceleration (PGA) is 0.333g for the site. For a Site Class C, the  $F_{PGA}$  is 1.2 and the mapped peak ground acceleration adjusted for Site Class effects ( $PGAM$ ) is 0.4g for the site.

Since the mapped spectral response at 1-second period is less than 0.75g, then all structures subject to the criteria in Section 1613.2.5 of the 2022 CBC are assigned Seismic Design Category D.

## 4.4 Secondary Seismic Hazards

In general, secondary seismic hazards can include soil liquefaction, seismically-induced settlement, lateral displacement, surface manifestations of liquefaction, landsliding, seiches, and tsunamis. The potential for secondary seismic hazards at the site is discussed below.

### 4.4.1 Liquefaction Potential

Liquefaction is the loss of soil strength or stiffness due to a buildup of excess pore-water pressure during strong ground shaking. Liquefaction is associated primarily with loose (low density), granular, saturated soil. Effects of severe liquefaction can include sand boils, excessive settlement, bearing capacity failures, and lateral spreading.

Due to the presence of shallow hard and very dense Tertiary-aged formational units and the absence of groundwater, the potential for liquefaction at the site is generally considered to be negligible.

### 4.4.2 Seismically-Induced Settlement

Dynamic settlement of soils can occur as a result of strong vibratory ground shaking. The shallow existing documented fill materials at the site are considered potentially compressible and recommendations for treatment of these materials during construction are provided later in this report. Due to the hard and very dense nature of the underlying Tertiary-aged formational units and the generally shallow depth of existing fills, the potential for dynamic settlement is low at the site.

### 4.4.3 Surface Manifestation of Liquefaction and Dynamic Settlement

Due to absence of a shallow groundwater table and the generally hard and very dense nature of the underlying Tertiary-aged formational units, the surface manifestation of dynamic settlement is anticipated to be negligible.

### 4.4.4 Lateral Spreading or Flow Failure

Due to the low potential for liquefaction, the potential for lateral spreading flow failure is very low.



#### 4.4.5 Tsunamis or Seiches

Tsunamis are long wavelength seismic sea waves (long compared to the ocean depth) generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity. A seiche is an oscillation (wave) of a body of water in an enclosed or semi-enclosed basin that varies in period, depending on the physical dimensions of the basin, from a few minutes to several hours, and in height from several inches to several feet. Based on the elevation (approximately 668 feet msl) and inland location of the site, the potential for damage due to either a tsunami or seiche is nil.

## 5.0 CONCLUSIONS

Based on the results of our investigation of the site, it is our opinion that the proposed Child Development Center Shade Structure Project at Grossmont High School is considered feasible from a geotechnical standpoint, provided the following conclusions and recommendations are incorporated into the project plans and specifications. The following is a summary of the significant geotechnical factors that we expect may affect development of the site.

- As the site is located in the seismically active southern California area, all structures should be designed to tolerate the dynamic loading resulting from seismic ground motions.
- Holocene-active or pre-Holocene active faults do not transect and do not project toward the site. The closest Holocene-active fault is the Rose Canyon fault zone located approximately 11.4 miles to the west.
- The peak horizontal ground acceleration associated with the Maximum Considered Earthquake Ground Motion is 0.333g. The peak horizontal ground acceleration associated with the  $PGA_M$  is 0.4g.
- The potential for liquefaction and seismic settlement at the site is low.
- The potential for slope instability at the site is considered to be low.
- Due to the gentle topography at the site and lack of adverse geologic conditions, landsliding and mass movement is considered to be unlikely.
- The existing onsite soils were found to have a very low potential for expansion.
- Exceptional geologic hazards are not anticipated to impact the site or the proposed site development.
- The existing onsite soils are generally suitable for use as engineered fill, provided that they have an expansion index less than 50 and are free of organic material, debris, and rock fragments larger than 6 inches in maximum dimension.
- Based on the results of our subsurface exploration, we anticipate that the onsite materials should be generally excavatable with conventional heavy-duty earthwork equipment. Localized cemented zones within the Pomerado Conglomerate, Mission Valley Formation and/or the Stadium Conglomerate may be difficult to excavate and may require heavy ripping or breaking, which can produce oversized rock fragments. In addition, the Pomerado and Stadium Conglomerate contain cobbles that range in size from 6 to 8 inches in diameter with isolated cobbles to up to 1 foot in diameter expected. Removed Pomerado and Stadium Conglomerate materials may need to be screened of plus sized material to be suitable for reuse as engineered fill.

Unknown objects such as buried concrete footings and debris left from previous site uses should be anticipated and are common on sites where previous structures existed.

- Based on the results of our geotechnical evaluation, it is our opinion that the proposed shade structure can be supported on drilled pile foundations (i.e., drilled CIDH piles).
- A static groundwater table should not be encountered during remedial grading and/or foundation excavation activities. Although not encountered during our exploration, localized seepage along cemented zones and sand lenses within the Pomerado Conglomerate, Mission Valley Formation and the Stadium Conglomerate may occur.
- Although Leighton does not practice corrosion engineering, laboratory test results indicate the soils present on the site have a negligible potential for sulfate attack on normal concrete. The onsite soils are considered to be medium to highly corrosive to buried uncoated ferrous metals. A corrosion engineer may be retained to design corrosion protection systems and to evaluate the appropriate concrete properties for the project.

Based on the results of our investigation of the site, the distress exhibited by the existing concrete flatwork is a result of a combination of factors which are summarized below:

- The distress exhibited by the existing concrete flatwork appears to be the result of a substandard concrete section (i.e. no aggregate base) over poorly compacted subgrade soils. Due to the adequate setback from the edge of the slope, we do not believe the distress is a result of slope creep.
- The underlying subdrain system parallels the distressed concrete flatwork. Based on the depth of the subdrain system, approximately 2 feet (bgs), and the observed standing water within the 6" area drain, it appears that the subdrain system is not functioning properly to provide positive drainage away from the patio. As a result, it is possible that the surrounding soils have become wet to saturated.
- Recommendations for mitigation of the distressed concrete flatwork is provided in the recommendations section of this report.

## 6.0 RECOMMENDATIONS

### 6.1 Earthwork

We anticipate that earthwork at the site will consist of site preparation, excavation, and fill operations. We recommend that earthwork on the site be performed in accordance with the following recommendations and the General Earthwork and Grading Specifications for Rough Grading included in Appendix E. In case of conflict, the following recommendations shall supersede those in Appendix E.

#### 6.1.1 Site Preparation

Prior to grading, all areas to receive structural fill, engineered structures, or hardscape should be cleared of surface and subsurface obstructions, including any existing debris and undocumented, loose, or unsuitable fill soils, and stripped of vegetation. Removed vegetation and debris should be properly disposed offsite. All areas to receive fill and/or other surface improvements should be scarified to a minimum depth of 8 inches, brought to at least 2 percent above the optimum moisture content, and recompact to at least 90 percent relative compaction based on ASTM Test Method D 1557.

#### 6.1.2 Excavations and Oversize Material

Excavations of the onsite materials may generally be accomplished with conventional heavy-duty earthwork equipment. However, local heavy ripping or breaking may be required if cemented zones within the Pomerado Conglomerate, Mission Valley Formation and/or Stadium Conglomerate are encountered. Excavation for utilities may also be difficult in some areas.

Due to the variable amount of oversized cobble in the Pomerado and Stadium Conglomerate, a screening process of the removed Pomerado and Stadium Conglomerate materials may need to be utilized to remove the plus sized cobble prior to its use as engineered fill. From a geotechnical perspective, it is considered acceptable to reuse the gravelly materials below a depth of 12 inches within the limits of the proposed improvements finished grade. Placement of fills with oversize materials shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill.

Oversize material larger than 3 inches should not be placed within 1 vertical feet of finish pad grade, hardscape subgrade, and within 2 feet of future utilities or underground construction. Cobble, or other irreducible material with a maximum dimension greater than 6 inches, should not be placed within engineered fill areas and should be disposed of offsite.

Where soils are found to have greater than 30 percent oversize particles retained on the  $\frac{3}{4}$ -inch sieve, corrections using ASTM D 4718 are no longer considered valid. Where materials exceed the oversize fraction allowed by ASTM D 4718, use of a test fill that contains oversize fraction within the allowable limits of the standard can be compacted and tested to develop a field method to obtain the specified compaction. That method should then be applied to subsequent layers that exceed the maximum allowable oversize percentage.

Due to the general density and soil type characteristics of the Pomerado Conglomerate, Mission Valley Formation and the Stadium Conglomerate, temporary shallow excavations less than 5 feet in depth with vertical sides should remain stable for the period required to construct utilities, provided the trenches are free of adverse geologic conditions. Overlying artificial fill soils and beds of friable sands within the Pomerado Conglomerate, Mission Valley Formation and/or Stadium Conglomerate present at the site may ravel during trenching operations. In accordance with OSHA requirements, excavations deeper than 5 feet should be shored or be laid back in accordance with Section 6.2 if workers are to enter such excavations.

#### 6.1.3 Remedial Grading

Potentially compressible documented fill at the site may settle as a result of wetting or settle under the surcharge of engineered fill and/or structural loads supported on shallow foundations.

Within the limits of the proposed remedial improvement areas, we recommend that at least 2 feet of compacted fill be placed below the proposed hardscape and any foundations. The bottom of all removals should be evaluated by a Certified Engineering Geologist to confirm conditions are as anticipated.

#### 6.1.4 Engineered Fill

In areas proposed to receive engineered fill, the existing upper 8 inches of subgrade soils should be scarified, then moisture conditioned to a moisture content above the optimum content, and compacted to 90 percent or more of the maximum laboratory dry density, as evaluated by ASTM D 1557. In general, the soil that is removed may be reused and placed as engineered fill provided the material is free of oversized rock, organic materials, and deleterious debris, and moisture conditioned to above optimum moisture content. Soil with an expansion index greater than 50 should not be used within 2 feet of concrete hardscape subgrade and should be disposed of offsite. In addition, oversize material larger than 3 inches shall not be placed within 1 vertical feet of finish pad grade, hardscape subgrade, and within 2 feet of future utilities or underground construction. Cobble, or other irreducible material with a maximum dimension greater than 6 inches, shall not be placed within engineered fill areas and should be disposed of offsite.

The fill materials should be moisture conditioned to at least 2 percent above the optimum moisture content and compacted to 90 percent or more relative compaction, in accordance with ASTM D 1557. Although the optimum lift thickness for fill soils will be dependent on the type of compaction equipment utilized, fill should generally be placed in uniform lifts not exceeding approximately 8 inches in loose thickness. Where adjacent utility lines are present and densely configured, it may be preferable to utilize a controlled low strength material (CLSM) for backfill.

Placement and compaction of fill should be performed in general accordance with the current City of El Cajon and also within the County of San Diego grading ordinances, California Building Code, sound construction practice, these recommendations and the General Earthwork and Grading Specifications for Rough Grading presented in Appendix E.

#### 6.1.5 Import Soils

Import soils, if required, should be granular in nature, have an expansion index less than 50 (per ASTM Test Method D 4829), and have a low corrosion impact to the proposed improvements. Import soils and/or the borrow site location should be evaluated by the geotechnical consultant prior to import.

The contractor should provide evidence that all import materials comply with Department of Toxic Substances Control guidelines for import materials.

#### 6.1.6 Expansive Soils and Selective Grading

Based on our laboratory testing, and observations, we anticipate the onsite soil materials generally possess an expansion index less than 50 (Appendix C). Although not anticipated, should more highly expansive materials be encountered, selective grading may need to be performed. In addition, soil materials located below proposed concrete hardscape areas should have an expansion index less than 50. Testing of pad and subgrade fill materials should be performed to confirm expansion potential according to ASTM D 4829.

#### 6.1.7 Controlled Low-Strength Material

Use of CLSM in lieu of compacted fill is considered acceptable from a geotechnical perspective. Also referred to as a “flowable fill”, the mix design for the CLSM should be appropriate for structural backfill applications in accordance with Section 1804A.6 of the 2022 California Building Code. The mix design should produce a consistency that will result in a flowable product at the time of placement which does not require manual means to move it into place. The CLSM should consist of a two-sack, sand-cement slurry and have and have a minimum compressive strength of 125 psi when tested in accordance with ASTM D4832. Water content in the CLSM should be maintained at a proportion to minimize subsidence and bleed water shrinkage. The CLSM should be placed on competent materials. Any standing water and any loose or soft materials should be removed prior to placement of the CLSM. Sampling of CLSM should be performed in accordance with ASTM D5971 and DSA IR 18-1.

### 6.2 **Remedial Measures for Distressed Concrete**

Short Term (Concrete): The distressed concrete may continue to be monitored. If left in the current state, additional distress will develop and will worsen. Routine maintenance should be anticipated which may include mitigating the distressed areas with an appropriate joint sealant.

Short Term (Subdrain System): The subdrain system should be thoroughly investigated to ensure that the system is functioning properly.

We recommend that a private utility locator be subcontracted in order to probe the existing subdrains using a push and/or crawler camera equipped with a sensor.

Long Term (Concrete): The concrete flatwork should be replaced in accordance with the recommendations provided in Section 6.

Long Term (Subdrain System): If warranted, the existing subdrain system should be replaced in accordance with Appendix E, Section 5.

### 6.3 Temporary Excavations

Sloping excavations may be utilized when adequate space allows. Based on the results of our investigation, we provide the following preliminary recommendations for sloped excavations in fill soils or competent Pomerado Conglomerate, Mission Valley Formation and/or Stadium Conglomerate without seepage conditions.

**Table 2. Maximum Slope Ratios**

<b>Excavation Depth (feet)</b>	<b>Maximum Slope Ratio in Fill Soils</b>	<b>Maximum Slope Ratio in Competent Formation</b>
0 to 5	1:1 (Horizontal to Vertical)	Vertical
5 to 20	1.5:1 (Horizontal to Vertical)	1:1 (Horizontal to Vertical)

The above values are based on the assumption that no surcharge loading or equipment will be placed within 10 feet of the top of slope. Care should be taken during excavation adjacent to the existing structures so that undermining does not occur. An OSHA “competent person” should observe the slope on a daily basis for signs of instability. An engineered design will be needed where groundwater or surcharge conditions are present.

### 6.4 Foundation Design

We recommend using CIDH friction piles to support the proposed shade structure. For the analysis and development of the vertical capacity of CIDH friction piles, an allowable skin friction of 300 and 400 psf may be utilized in existing fill and competent formational materials, respectively. For upward loads, a skin friction of 150 psf may be utilized. Skin friction may be combined with end bearing for downwardly loaded piles where the bottom of the drilled pile excavation is embedded a minimum of 2-feet into competent formational material and has been cleaned of any loose accumulation of cuttings.



A value of 4,000 psf may be utilized for allowable end bearing. A one-third increase may be utilized for short term loads as allowed for by CBC Section 1806A, for alternative basic load combinations of Section 1805A.3.2 that include wind and earthquake loads.

Pile settlement is anticipated to be less than ¼-inch under design loads and normal service conditions where capacity is based solely on pile skin friction. Where end bearing is also considered in design, up to ½-inch of settlement may be required to mobilize end bearing. The design skin friction and end bearing are based on center to center pile spacing of at least 3 pile diameters. Where piles are spaced more closely, a reduction in pile capacity is necessary. Construction of piles should be sequenced such that the concrete of constructed piles is allowed to setup prior to construction of piles within 5 diameters.

To resist lateral loads, if any, CIDH piles can be designed in accordance with Section 1807A.3 of the 2022 CBC. For level ground conditions, we recommend lateral soil bearing pressures determined from Table 1806A.2 of 150 psf per foot of depth below the finish grade be used for determination of parameters S1 and S3, in the Non-constrained and Constrained design criteria, respectively. As allowed by Section 1806A.3.4, a two-times increase in lateral bearing pressure may be used for short term loading for isolated poles that are not adversely affected by ½-inch motion at the ground surface. These pressures assume piles spaced at least eight diameters center-to-center. Where sloping ground is present or piles are more closely spaced, revised parameters should be provided.

#### 6.4.1 Pile Installation

All pile installation should be performed under the observation of the geotechnical consultant and consistent with standard practice. Drilling equipment should be powerful enough to drill through the overlying fill soils and into the Tertiary-aged bedrock units to the design penetration depths. The contractor should anticipate difficult drilling conditions in formational materials with cobbles up to 8 inches in maximum dimension. Once a pile excavation has been started, it should be completed within 8 hours, which includes inspection, placement of the reinforcement, and placement of the concrete.

Caving of friable, soft or loose soils may occur where open excavations are made. Therefore, a starter casing may be considered to protect the top of

the borehole to mitigate caving conditions. In addition, the contractor should also be prepared to employ casing or other methods of advancing the drilled pile excavation to temporarily mitigate caving, if needed. Use of casing should be at the contractor's discretion. Loose materials should be removed from the bottom of the pile excavation prior to concrete placement.

If pile excavations become bell-shaped and cannot be advanced due to severe caving, the caved region may be filled with a sand/cement slurry and redrilled. Redrilling may continue when the slurry has reached suitable set and strength. In this case, it may be prudent to utilize casing or other special methods to facilitate continued drilling after the slurry has set.

#### 6.4.2 Foundation Setback

We recommend a minimum horizontal setback distance from the face of slopes for all structural foundations, footings, and other settlement-sensitive structures as indicated on Table 3 below. This distance is measured from the outside bottom edge of the footing, horizontally to the slope or retaining wall face, and is based on the overall slope or wall height. The foundation setback distance may be revised by the geotechnical consultant on a case-by-case basis if the geotechnical conditions are different than anticipated.

**Table 3. Minimum Foundation Setback from Slope Faces**

<b>Slope Height</b>	<b>Minimum Recommended Foundation Setback</b>
less than 5 feet	5 feet
5 to 15 feet	7 feet

Please note that the soils within the structural setback area possess poor lateral stability, and improvements (such as retaining walls, sidewalks, fences, pavements, etc.) constructed within this setback area may be subject to lateral movement and/or differential settlement. Potential distress to such improvements may be mitigated by providing a deepened footing or a pier and grade beam foundation system to support the improvement.

In addition, open or backfilled utility trenches that parallel or nearly parallel structure footings should not encroach within an imaginary 2:1 (horizontal to vertical) downward sloping line starting 9 inches above the bottom edge of

the footing and should also not be located closer than 18 inches from the face of the footing.

Where pipes cross under footings, the footings should be specially designed. Pipe sleeves should be provided where pipes cross through footings or footing walls and sleeve clearances should provide for possible footing settlement.

## **6.5 Geochemical Considerations**

Concrete in direct contact with soil or water that contains a high concentration of soluble sulfates can be subject to chemical deterioration commonly known as “sulfate attack.” Soluble sulfate results (Appendix C) indicated a negligible exposure potential for sulfate attack on normal concrete. The test results indicate that sulfate contents of the subsurface soils are categorized as having a sulfate exposure Class “S0” utilizing ACI 318R-14 Table 19.3.1.1. Concrete in contact with earth materials should be designed in accordance with Section 4 of ACI 318-14 (ACI, 2014) Table 19.3.2.1.

Minimum resistivity and pH tests were performed on representative samples of subgrade soils (Appendix C). Based on laboratory test results, the site soils have a low corrosion potential to buried uncoated metal conduits (Caltrans, 2021). A corrosion consultant may be contacted for further recommendations.

## **6.6 Concrete Flatwork**

Concrete sidewalks and other flatwork (including construction joints) should be designed by the project civil engineer and should have a minimum thickness of 4 inches. For all concrete flatwork, the upper 12 inches of subgrade soils should be moisture conditioned to at least 2 percent above optimum moisture content and compacted to at least 90 percent relative compaction based on ASTM Test Method D 1557 prior to the concrete placement.

Control joints should be provided at a distance equal to 24 times the slab thickness in inches, not exceeding 12 feet. Expansion joints should be incorporated where paving abuts a vertical surface, where paving changes direction and at 30 feet maximum spacing, joints should be laid out so as to create square or nearly square areas.

## **6.7 Construction Observation**

The recommendations provided in this report are based on preliminary design information and subsurface conditions disclosed by widely spaced excavations. The interpolated subsurface conditions should be checked by Leighton Consulting, Inc. in the field during construction. Construction observation of all onsite excavations and field density testing of all compacted fill should be performed by a representative of this office.

We recommend that all excavations be mapped by the geotechnical consultant during grading to determine if any potentially adverse geologic conditions exist at the site.

## **6.8 Plan Review**

Final project grading and foundation plans should be reviewed by Leighton Consulting as part of the design development process to ensure that recommendations in this report are incorporated in project plans.

## 7.0 LIMITATIONS

The nature of many sites is such that differing geotechnical or geological conditions can occur over small areal distances and under varying climatic conditions. The conclusions and recommendations in this report are based in part upon data that were obtained from a limited number of observations, site visits, excavations, samples, and tests. Such information is by necessity incomplete and therefore preliminary. Changes in subsurface conditions can and do occur over time. Therefore, the findings, conclusions, and recommendations presented in this report are considered preliminary and can be relied upon only if Leighton has the opportunity to observe the subsurface conditions during grading and construction of the project, in order to confirm that our preliminary findings are representative for the site.

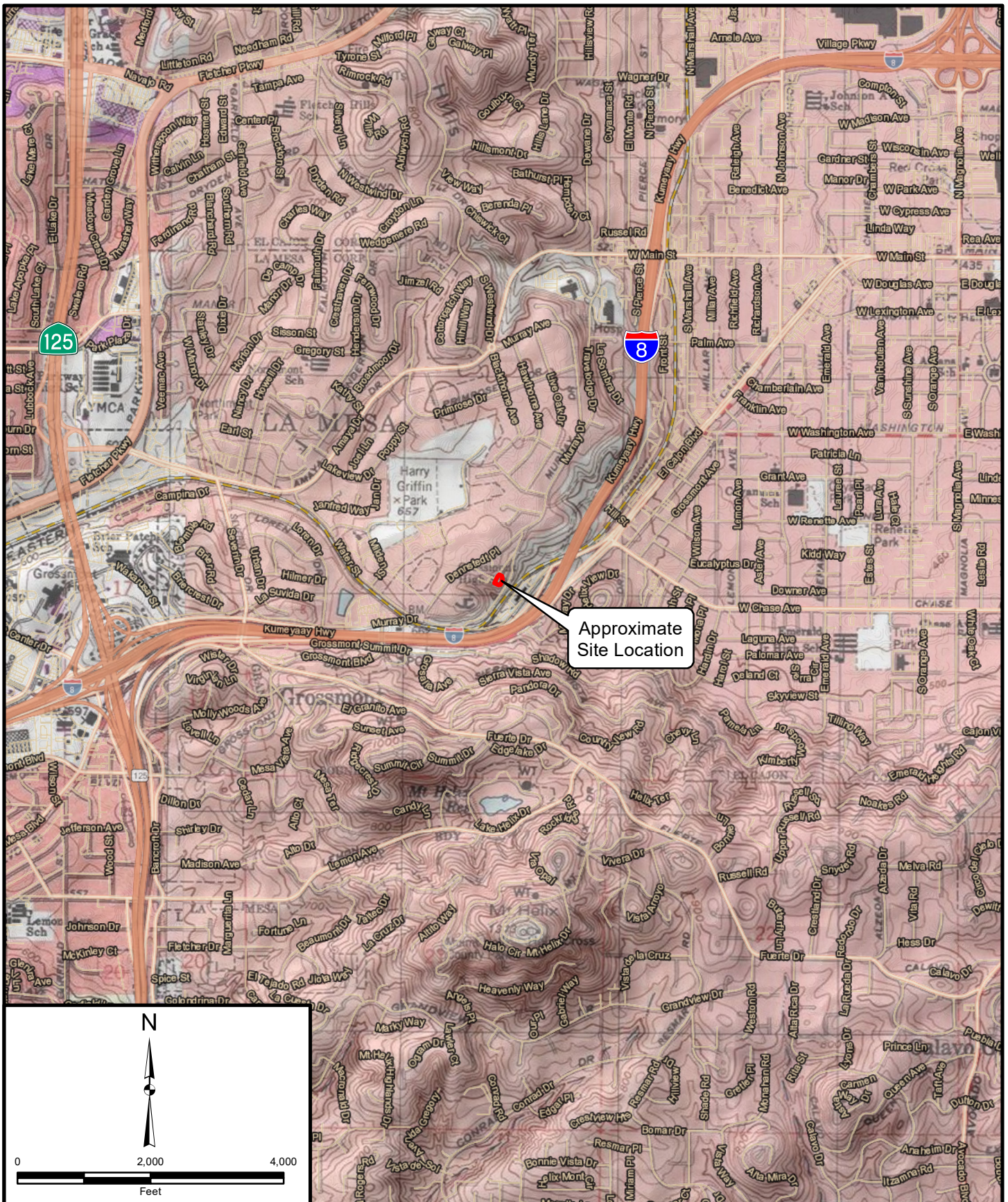
**IMPORTANT:** Public school geotechnical reports in California are typically reviewed by the California Geologic Survey (CGS) with oversight by the California Division of the State Architect (DSA). CGS and DSA requirements change and evolve with time. Geologic data in this report is not valid for a public school project until it is reviewed and approved by CGS. Anyone using this report before CGS approval does so at their own risk and by their actions agree to indemnify, defend and hold harmless Leighton Consulting, Inc. from and against any and all alleged or real damage claims, including consequential damages, arising from use of this report before DSA approval.

Hazardous materials services were not included as part of this study, nor are they within the scope of this report.

This report was prepared for the sole use of Grossmont Union High School District and their design team, for application to the design of the proposed Child Development Center Shade Structure Project in accordance with generally accepted California licensed geotechnical engineering practices at this time in California.

## FIGURES

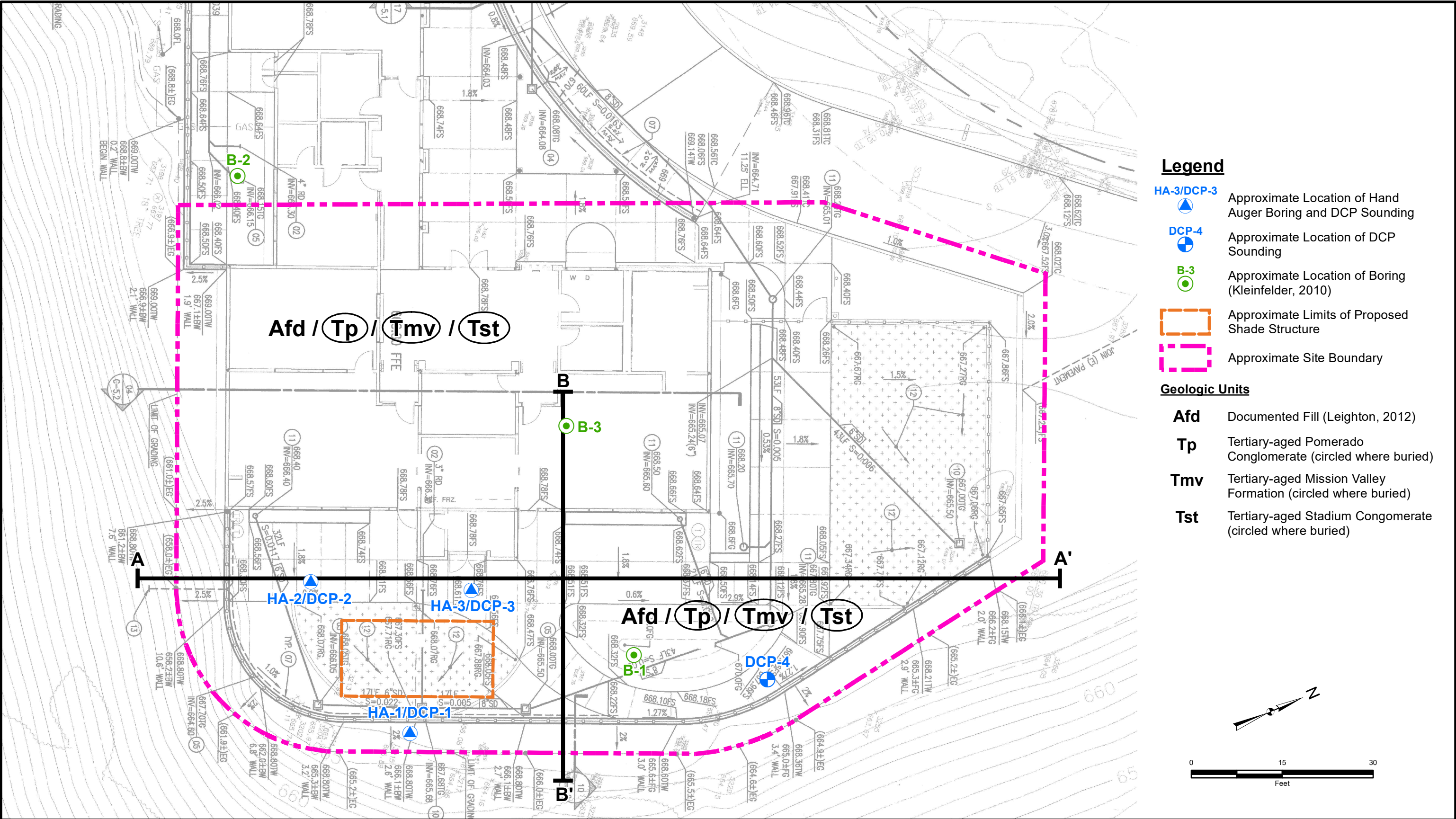




Project: 12429.034	Eng/Geol: NJT/RNB	<div><h1>SITE LOCATION MAP</h1><p>CDC Shade Structure Project Grossmont High School El Cajon, California</p></div>	FIGURE 1
Scale: 1" = 2,000'	Date: June 2023		<div>Leighton</div>
Reference: Esri, HERE, Garmin, (c) OpenStreetMap contributors Author: (mmurphy)			





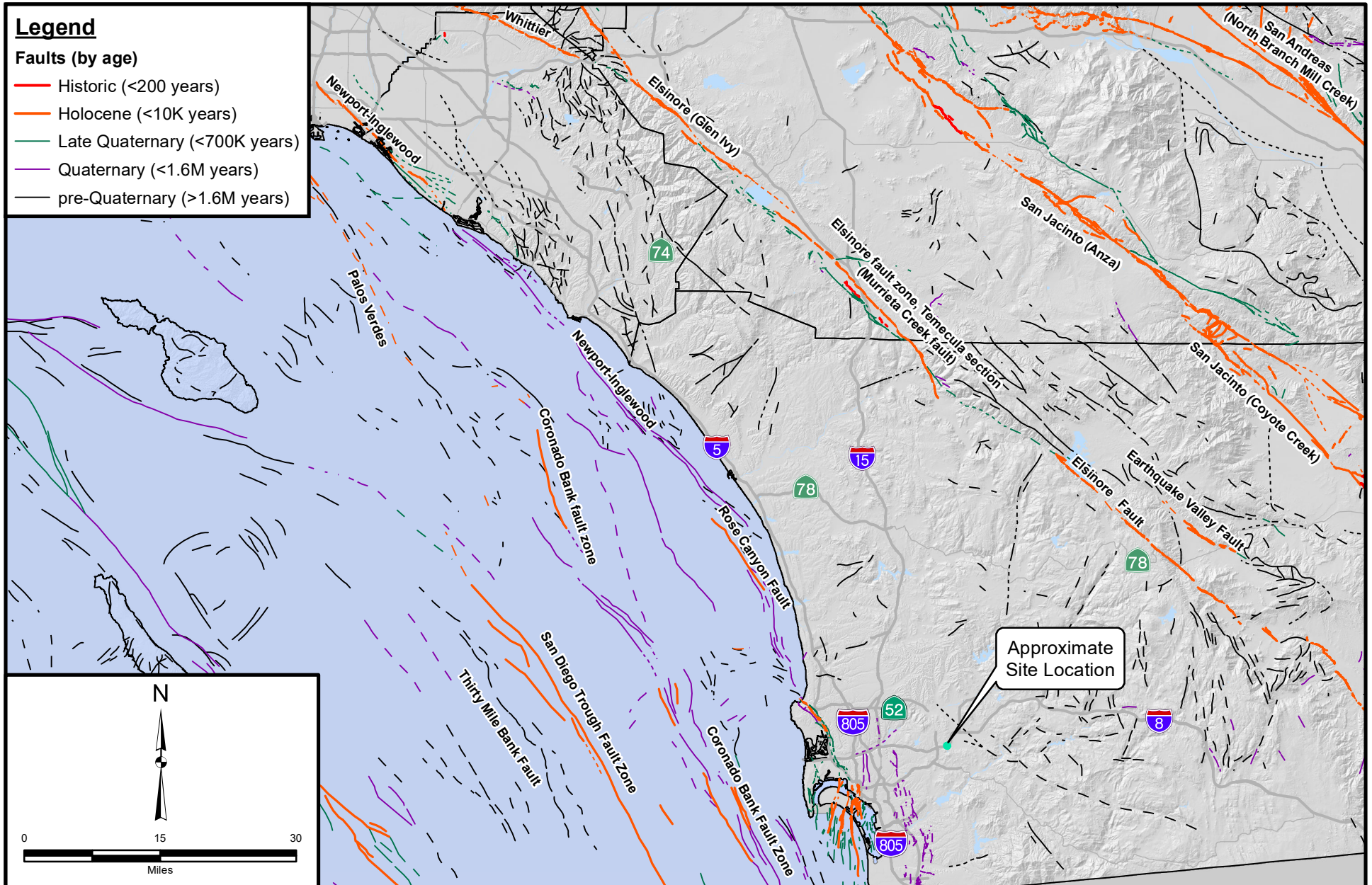




## Legend

### Faults (by age)

- Historic (<200 years)
- Holocene (<10K years)
- Late Quaternary (<700K years)
- Quaternary (<1.6M years)
- pre-Quaternary (>1.6M years)



Project: 12429.034    Eng/Geol: NJT/RNB

Scale: 1" = 15 miles    Date: June 2023

Faults: Bryant, Bryant CGS 2010

Author: Leighton Geomatics (mmurphy)

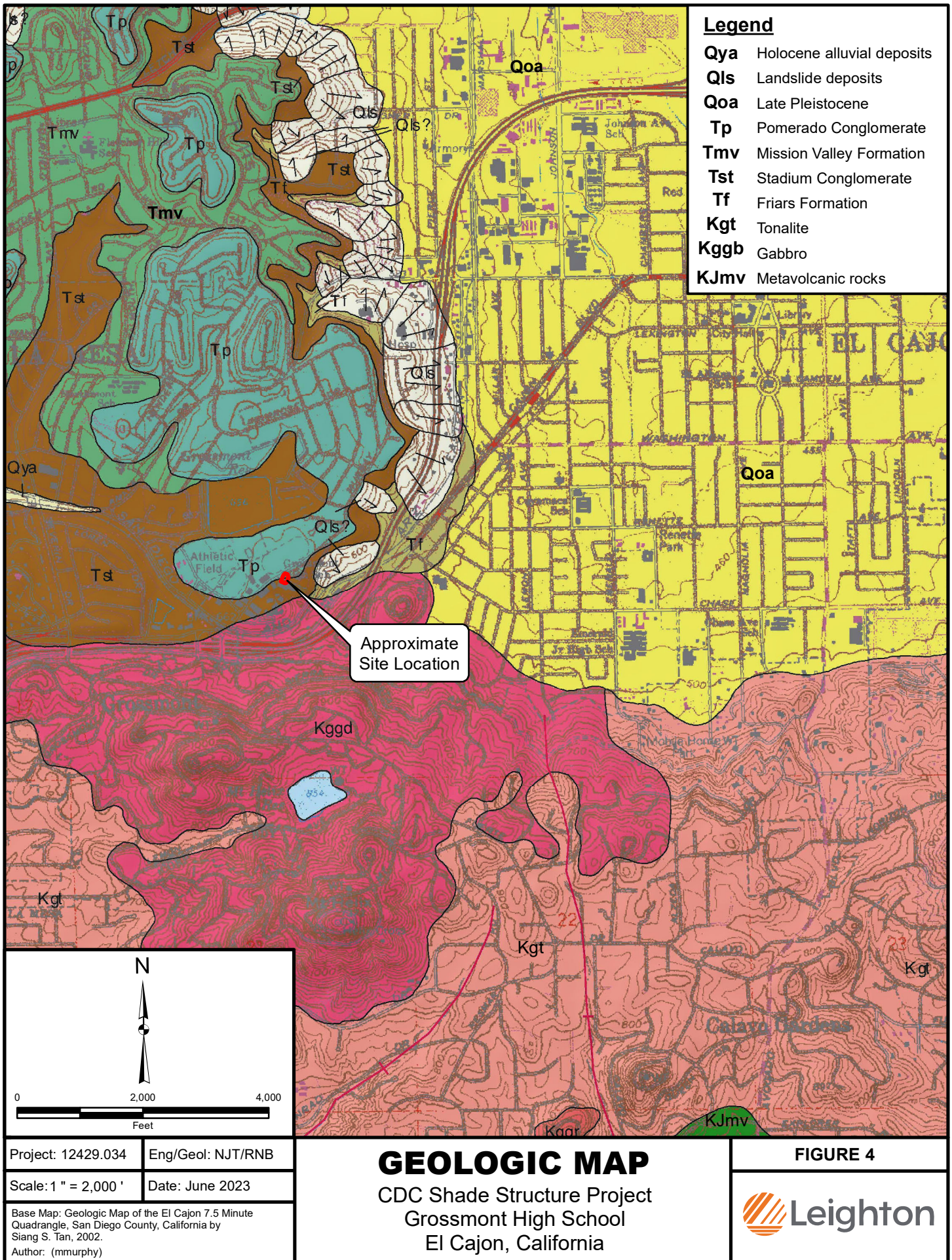
## REGIONAL FAULT MAP

CDC Shade Structure Project  
Grossmont High School  
El Cajon, California

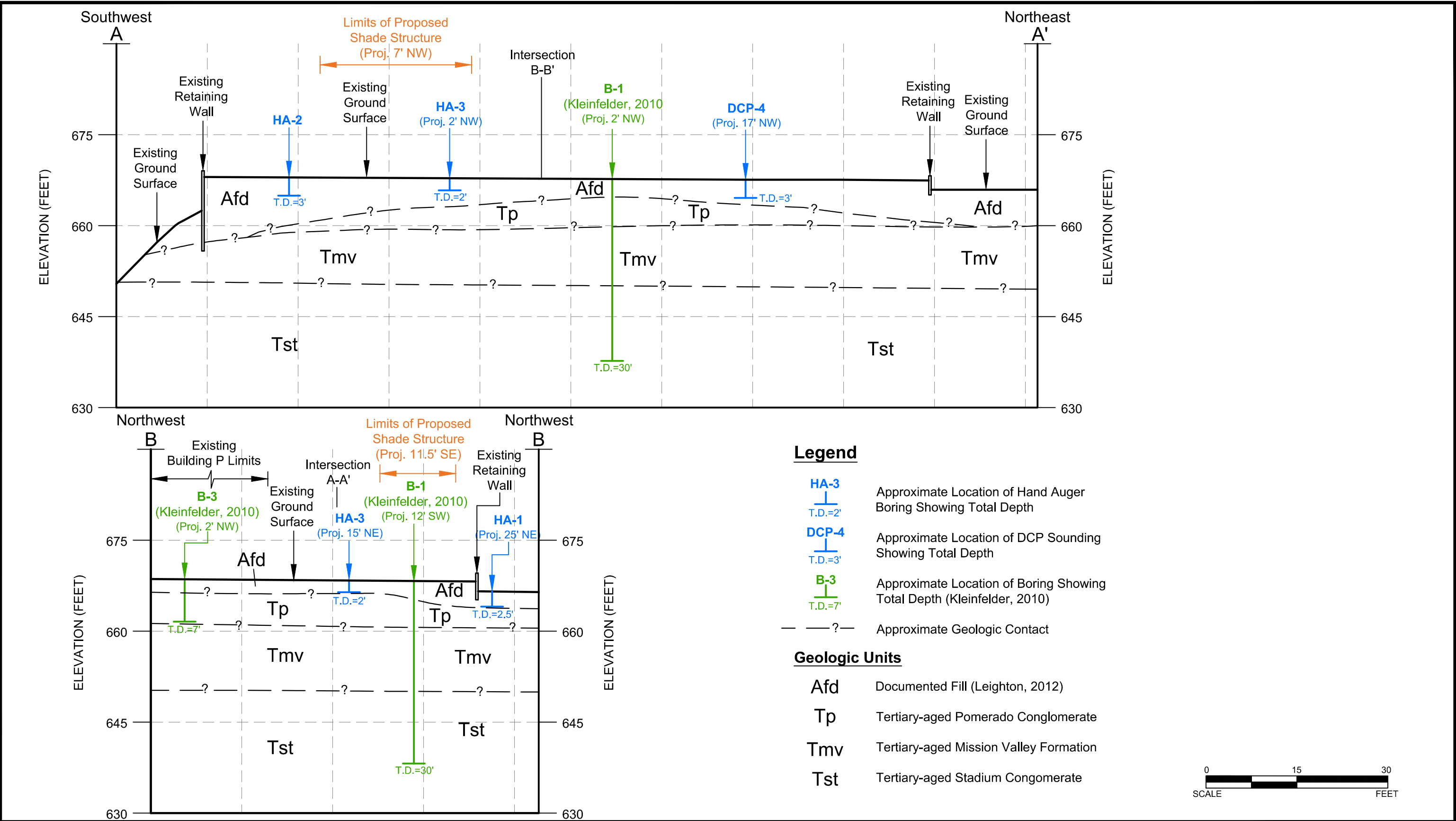
FIGURE 3











Proj: 12429.034	Eng/Geol: NJT/RNB
Scale: 1"=15'	Date: June 2023
Base Map:	

**GEOLOGIC CROSS-SECTIONS A-A' & B-B'**

CDC Shade Structure Project  
Grossmont High School  
El Cajon, California

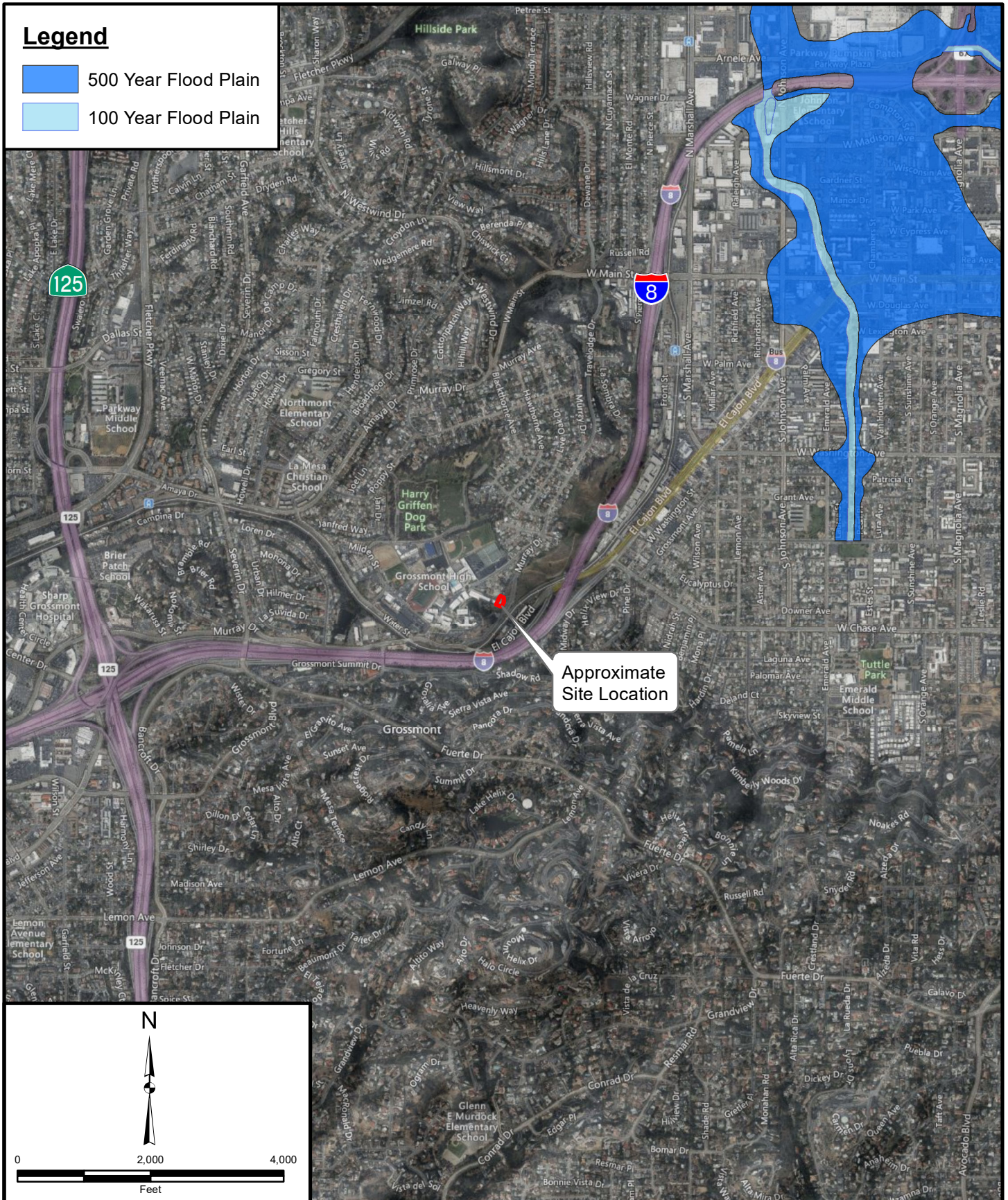
FIGURE 5





## Legend

- 500 Year Flood Plain
- 100 Year Flood Plain



Approximate  
Site Location

Project: 12429.034 Eng/Geol: NJT/RNB

Scale: 1" = 2,000' Date: June 2023

Reference: © 2023 Microsoft Corporation © 2023  
Maxar ©CNES (2023) Distribution Airbus DS © 2023  
TomTom

Reference: FEMA, DWR

## FLOOD HAZARD MAP


CDC Shade Structure Project  
Grossmont High School  
El Cajon, California

FIGURE 6





## Legend

 Grossmont Dam



Approximate  
Site Location

Project: 12429.034

Eng/Geol: NJT/RNB

Scale: 1" = 2,000'

Date: June 2023

Reference: © 2023 Microsoft Corporation © 2023  
Maxar ©CNES (2023) Distribution Airbus DS © 2023  
TomTom

Reference: CA DWR, FEMA

## DAM INUNDATION MAP

CDC Shade Structure Project  
Grossmont High School  
El Cajon, California

FIGURE 7





## **APPENDIX A**

### **References**

## **APPENDIX A**

### References

- American Concrete Institute, 2014, Building Code Requirements for Structural Concrete (ACI 318-14) and Commentary.
- Associated Society of Civil Engineers (ASCE), 2016, ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures.
- Blake, T.F., 2000, EQSEARCH for Windows Version 3.00a, with updated database 2023.
- California Building Standards Commission (CBSC), 2022, California Building Code, Volumes 1 and 2.
- Caltrans, 2021, Corrosion Guidelines, Version 3.2, May 2021.
- California Geologic Survey (CGS), 2000, Digital Images of Official Maps of Alquist-Priolo Earthquake Fault Zones of California, Southern Region, DMG CD 2000-02.
- \_\_\_\_\_, 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California Special Public 117a.
- \_\_\_\_\_, 2019, Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Building – Note 48, dated November 2019.
- \_\_\_\_\_, 2018, Special Publication 42, Earthquake Fault Zones, revised 2018.
- Churchill, Ronald, 1991, Geologic Controls on the Distribution of Radon in California, Department of Health Services, dated January 25.
- FEMA, 2012, Flood Insurance Maps, Panel 1661 of 2375, dated May 16.
- Geologic Map of the El Cajon 7.5' Quadrangle, San Diego County California, A Digital Preparation by Jonathan Williams and Sybil Jorgensen, 2002.
- Jennings, 2010 Fault Activity Map of California, Geological Survey 150th Anniversary, 1:750,000 scale.
- Kennedy, M.P., 1975, Geology of the San Diego Metropolitan area, California, California, California Division of Mines and Geology, Bulletin 200.

Kleinfelder, 2010, Geotechnical Engineering Report, Proposed Child Development Center, Phase 1A, Grossmont High School, El Cajon, California, Project No. 110515, dated May 7, 2010.

Leighton Consulting, Inc., 2020, Geotechnical Investigation, Visitor Bleacher Replacement Project, Grossmont High School, Project Number 12739.001, dated May 1, 2020.

Leighton Consulting, Inc., 2019, Geotechnical Investigation, Stadium Bleacher Replacement Project, Grossmont High School, Project Number 11006.015, dated March 28, 2019.

Leighton Consulting, Inc., 2012, Geotechnical Report of Earthwork, Child Development Center Phase 1A, Grossmont High School, El Cajon, California, DSA File No. 37-H4/DSA Application No. 04-111058, Project Number 603082-001, April 2, 2012.

Leighton Consulting, Inc., 2011, Building Pad Overexcavation and Building Foundation Support, Grossmont High School, Child Development Center- Phase 1A, 1100 Murray Drive, DSA File No. 37-H4/DSA Application No. 04-111058, Project Number 603082-001, May 18, 2011.

Leighton Consulting, Inc., 2011, Geotechnical Review of In-Grading Cross-Sections D-D' and E-E', Grossmont High School, Child Development Center- Phase 1A, 1100 Murray Drive, DSA File No. 37-H4/DSA Application No. 04-111058, Project Number 603082-001, May 10, 2011.

Leighton Consulting, Inc., 2011, Site and Building Retaining Wall Foundation Review, Grossmont High School, Child Development Center- Phase 1A, 1100 Murray Drive, DSA File No. 37-H4/DSA Application No. 04-111058, Project Number 603082-001, dated April 29, 2011.

Miller, C.D., 1989, Potential Hazards from Future Volcanic Eruptions in California: U.S. Geological Survey Bulletin 1847, Plate I, Scale 1:500,000.

Pradel, D., 1998, "Procedures to Evaluate Earthquake-Induced Settlements in Dry Sandy Soils," Journal of Geotechnical and Geoenvironment Engineering 101(4).

Rockwell, T.K., and Murbach M., 1999, Holocene Earthquake History of the Rose Canyon Fault Zone: Final Technical Report Submitted for USGS Grant No. 1434-95-G-2613, 37pp.



Ruhnau Clarke Architects, 2022, Architectural Plans, Childcare Center Shade Structure, Grossmont High School, 1100 Murray Drive, El Cajon, CA 92020, Grossmont Union High School District, dated July 12, 2022.

SEAOC, 2023, USGS Seismic Design Data via SEAOC/OSHPD Seismic Design Maps Web Application, accessed May 31, 2023, at <https://seismicmaps.org>

Tan, S.S., 2002, Geologic Map of the El Cajon 7.5' Quadrangle, San Diego County California, A Digital Preparation by Jonathan Williams and Sybil Jorgensen, 2002.

Tokimatsu, K. and Seed, H. B., 1987, "Evaluation of Settlements in Sands Due to Earthquake Shaking," Journal of the Geotechnical Engineering Division, ASCE 113 (8).

Treiman, J.A., 1993, The Rose Canyon Fault Zone, Southern California: California Division of Mines and Geology, Open-File Report 93-02, 45 p.

USGS Seismic Design Maps Web Application, 2008.

**APPENDIX B**  
**Exploration Logs**

**Current Exploration Logs  
(This Study)**

# GEOTECHNICAL BORING LOG KEY

Date \_\_\_\_\_ Sheet 1 of 1  
 Project \_\_\_\_\_ KEY TO BORING LOG GRAPHICS Project No. \_\_\_\_\_  
 Drilling Co. \_\_\_\_\_ Type of Rig \_\_\_\_\_  
 Hole Diameter \_\_\_\_\_ Drive Weight \_\_\_\_\_ Drop \_\_\_\_\_  
 Elevation Top of Elevation \_\_\_\_\_ Location \_\_\_\_\_

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per Foot	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	DESCRIPTION	Type of Tests
		N S							Logged By _____ Sampled By _____	
	0								Asphaltic concrete.	
									Portland cement concrete.	
								CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay.	
								CH	Inorganic clay; high plasticity, fat clays.	
	5							OL	Organic clay; medium to plasticity, organic silts.	
								ML	Inorganic silt; clayey silt with low plasticity.	
								MH	Inorganic silt; diatomaceous fine sandy or silty soils; elastic silt.	
								ML-CL	Clayey silt to silty clay.	
								GW	Well-graded gravel; gravel-sand mixture, little or no fines.	
	10							GP	Poorly graded gravel; gravel-sand mixture, little or no fines.	
								GM	Silty gravel; gravel-sand-silt mixtures.	
								GC	Clayey gravel; gravel-sand-clay mixtures.	
								SW	Well-graded sand; gravelly sand, little or no fines.	
								SP	Poorly graded sand; gravelly sand, little or no fines.	
	15							SM	Silty sand; poorly graded sand-silt mixtures.	
								SC	Clayey sand; sand-clay mixtures.	
									Bedrock.	
	20			B-1					Ground water encountered at time of drilling.	
				C-1					Bulk Sample 1.	
				G-1					Core Sample.	
				R-1					Grab Sample.	
				SH-1					Modified California Sampler (3" O.D., 2.5 I.D.).	
				S-1					Shelby Tube Sampler (3" O.D.).	
	25			PUSH					Standard Penetration Test SPT (Sampler (2" O.D., 1.4" I.D.).	
									Sampler Penetrates without Hammer Blow.	
	30									

## SAMPLE TYPES:

S SPLIT SPOON  
 R RING SAMPLE  
 B BULK SAMPLE  
 T TUBE SAMPLE

G GRAB SAMPLE  
 SH SHELBY TUBE

## TYPE OF TESTS:

DS DIRECT SHEAR  
 MD MAXIMUM DENSITY  
 CN CONSOLIDATION  
 CR CORROSION

SA SIEVE ANALYSIS  
 AT ATTERBURG LIMITS  
 EI EXPANSION INDEX  
 RV R-VALUE



# GEOTECHNICAL BORING LOG HA-1

Project No.	12429.034	Date Drilled	6-3-23
Project	CDC Shade Structure Project Grossmont High School	Logged By	CA
Drilling Co.	N/A	Hole Diameter	3.25"
Drilling Method	Hand Auger	Ground Elevation	665' msl
Location	See Figure 2	Sampled By	CA

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION <small><i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i></small>	Type of Tests
665	0	N S		B-1 (0-2.5')				SM	<p><b>DOCUMENTED ARTIFICIAL FILL (Afd)</b>  @ 0'-2': Silty SAND with GRAVEL, medium dense, brown (7.5YR, 4/2), slightly moist, fine to medium SAND, fine to coarse gravel, trace cobble, trace rootlets, trace asphalt concrete debris.</p> <p>@ 2'-2.5': Increase in gravel noted.</p>	
									<p>Hand Auger Refusal on Gravel-Cobble @ 2.5 Feet (bgs)  No Groundwater or Seepage Encountered  Backfilled on 6/3/23</p>	
660	5									


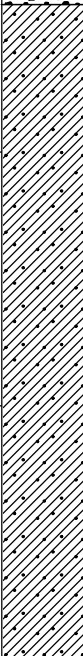
SAMPLE TYPES:		TYPE OF TESTS:	
B BULK SAMPLE	-200 % FINES PASSING	DS DIRECT SHEAR	SA SIEVE ANALYSIS
C CORE SAMPLE	AL ATTERBERG LIMITS	EI EXPANSION INDEX	SE SAND EQUIVALENT
G GRAB SAMPLE	CN CONSOLIDATION	H HYDROMETER	SG SPECIFIC GRAVITY
R RING SAMPLE	CO COLLAPSE	MD MAXIMUM DENSITY	UC UNCONFINED COMPRESSIVE
S SPLIT SPOON SAMPLE	CR CORROSION	PP POCKET PENETROMETER	STRENGTH
T TUBE SAMPLE	CU UNDRAINED TRIAXIAL	RV R VALUE	



# GEOTECHNICAL BORING LOG HA-2

**Project No.** 12429.034  
**Project** CDC Shade Structure Project Grossmont High School  
**Drilling Co.** N/A  
**Drilling Method** Hand Auger  
**Location** See Figure 2

**Date Drilled** 6-3-23  
**Logged By** CA  
**Hole Diameter** 3.25"  
**Ground Elevation** 668.5' msl  
**Sampled By** CA

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0								5" of CONCRETE	
				B-1 (0.5-3')				SC	<p><b>DOCUMENTED ARTIFICIAL FILL (Afd)</b></p> <p>@ 0.5'-1.5': Clayey SAND with GRAVEL, medium dense, brown (7.5YR, 4/2), moist, fine to medium SAND, fine to coarse gravel, trace cobble.</p> <p>@ 1.5': Becomes loose.</p>	EI, CR
665									<p>Hand Auger Refusal on Gravel-Cobble @ 3 Feet (bgs)</p> <p>No Groundwater or Seepage Encountered</p> <p>Backfilled on 6/3/23</p>	
5										

**SAMPLE TYPES:**

B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE

**TYPE OF TESTS:**

-200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL


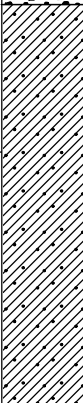
DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE

SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



# GEOTECHNICAL BORING LOG HA-3

Project No.	12429.034	Date Drilled	6-3-23
Project	CDC Shade Structure Project Grossmont High School	Logged By	CA
Drilling Co.	N/A	Hole Diameter	3.25"
Drilling Method	Hand Auger	Ground Elevation	668.5' msl
Location	See Figure 2	Sampled By	CA

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION <i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>	Type of Tests
	0								5" of CONCRETE	
				B-1 (0.5-2')				SC	<b>DOCUMENTED ARTIFICIAL FILL (Afd)</b> @ 0.5'-1.5': Clayey SAND with GRAVEL, loose to medium dense, brown (7.5YR, 4/2), moist, fine to medium SAND, fine to coarse gravel, trace cobble.  @ 1.5': Becomes loose.	MD, DS
665									<b>Hand Auger Refusal on Gravel-Cobble @ 2 Feet (bgs)</b> <b>No Groundwater or Seepage Encountered</b> <b>Backfilled on 6/3/23</b>	
5										

**SAMPLE TYPES:**

B BULK SAMPLE  
 C CORE SAMPLE  
 G GRAB SAMPLE  
 R RING SAMPLE  
 S SPLIT SPOON SAMPLE  
 T TUBE SAMPLE

**TYPE OF TESTS:**

-200 % FINES PASSING  
 AL ATTERBERG LIMITS  
 CN CONSOLIDATION  
 CO COLLAPSE  
 CR CORROSION  
 CU UNDRAINED TRIAXIAL

DS DIRECT SHEAR  
 EI EXPANSION INDEX  
 H HYDROMETER  
 MD MAXIMUM DENSITY  
 PP POCKET PENETROMETER  
 RV R VALUE

SA SIEVE ANALYSIS  
 SE SAND EQUIVALENT  
 SG SPECIFIC GRAVITY  
 UC UNCONFINED COMPRESSIVE STRENGTH



# WILDCAT DYNAMIC CONE LOG

Page 1 of 1

Leighton

PROJECT NUMBER: 12429.034  
DATE STARTED: 06-03-2023  
DATE COMPLETED: 06-03-2023

HOLE #: DCP-1  
CREW: CA  
PROJECT: CDC Shade Structure Project Grossmont High School  
ADDRESS: 1100 Murray Drive, El Cajon, California  
LOCATION: See Figure 2

SURFACE ELEVATION: 665' (msl)  
WATER ON COMPLETION: N/A  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	17	75.5	.....	21	MEDIUM DENSE	VERY STIFF
-	15	66.6	.....	19	MEDIUM DENSE	VERY STIFF
- 1 ft	12	53.3	.....	15	MEDIUM DENSE	STIFF
-	13	57.7	.....	16	MEDIUM DENSE	VERY STIFF
-	12	53.3	.....	15	MEDIUM DENSE	STIFF
- 2 ft	25	111.0	.....	25+	DENSE	HARD
-	50	222.0	.....	25+	VERY DENSE	HARD
-	60	266.4	.....	25+	VERY DENSE	HARD
- 3 ft	55	244.2	.....	25+	VERY DENSE	HARD
- 1 m						
-						
- 4 ft						
-						
-						
- 5 ft						
-						
-						
- 6 ft						
-						
- 2 m						
-						
- 7 ft						
-						
-						
- 8 ft						
-						
-						
- 9 ft						
-						
- 3 m						
- 10 ft						
-						
-						
- 11 ft						
-						
-						
- 12 ft						
-						
- 4 m						
- 13 ft						



# WILDCAT DYNAMIC CONE LOG

Page 1 of 1

Leighton

PROJECT NUMBER: 12429.034  
DATE STARTED: 06-03-2023  
DATE COMPLETED: 06-03-2023

HOLE #: DCP-2  
CREW: CA  
PROJECT: CDC Shade Structure Project Grossmont High School  
ADDRESS: 1100 Murray Drive, El Cajon, California  
LOCATION: See Figure 2

SURFACE ELEVATION: 668.5' (msl)  
WATER ON COMPLETION: N/A  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	12	53.3	.....	15	MEDIUM DENSE	STIFF
-	11	48.8	.....	13	MEDIUM DENSE	STIFF
- 1 ft	8	35.5	.....	10	LOOSE	STIFF
-	10	44.4	.....	12	MEDIUM DENSE	STIFF
-	8	35.5	.....	10	LOOSE	STIFF
- 2 ft	8	35.5	.....	10	LOOSE	STIFF
-	8	35.5	.....	10	LOOSE	STIFF
-	14	62.2	.....	17	MEDIUM DENSE	VERY STIFF
- 3 ft	15	66.6	.....	19	MEDIUM DENSE	VERY STIFF
- 1 m	17	75.5	.....	21	MEDIUM DENSE	VERY STIFF
-	14	54.0	.....	15	MEDIUM DENSE	STIFF
- 4 ft	16	61.8	.....	17	MEDIUM DENSE	VERY STIFF
-	14	54.0	.....	15	MEDIUM DENSE	STIFF
-	19	73.3	.....	20	MEDIUM DENSE	VERY STIFF
- 5 ft	14	54.0	.....	15	MEDIUM DENSE	STIFF
-	13	50.2	.....	14	MEDIUM DENSE	STIFF
-	10	38.6	.....	11	MEDIUM DENSE	STIFF
- 6 ft	16	61.8	.....	17	MEDIUM DENSE	VERY STIFF
-	30	115.8	.....	25+	DENSE	HARD
- 2 m	31	119.7	.....	25+	DENSE	HARD
- 7 ft	52	177.8	.....	25+	DENSE	HARD
-	24	82.1	.....	23	MEDIUM DENSE	VERY STIFF
-	20	68.4	.....	19	MEDIUM DENSE	VERY STIFF
- 8 ft	22	75.2	.....	21	MEDIUM DENSE	VERY STIFF
-	50	171.0	.....	25+	DENSE	HARD
- 9 ft						
- 3 m 10 ft						
- 11 ft						
- 12 ft						
- 4 m 13 ft						

# WILDCAT DYNAMIC CONE LOG

Page 1 of 1

Leighton

PROJECT NUMBER: 12429.034  
DATE STARTED: 06-03-2023  
DATE COMPLETED: 06-03-2023

HOLE #: DCP-3  
CREW: CA  
PROJECT: CDC Shade Structure Project Grossmont High School  
ADDRESS: 1100 Murray Drive, El Cajon, California  
LOCATION: See Figure 2

SURFACE ELEVATION: 668.5' (msl)  
WATER ON COMPLETION: N/A  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	8	35.5	.....	10	LOOSE	STIFF
-	18	79.9	.....	22	MEDIUM DENSE	VERY STIFF
- 1 ft	50	222.0	.....	25+	VERY DENSE	HARD
-						
- 2 ft						
-						
- 3 ft						
- 1 m						
-						
- 4 ft						
-						
- 5 ft						
-						
- 6 ft						
-						
- 2 m						
- 7 ft						
-						
- 8 ft						
-						
- 9 ft						
-						
- 3 m 10 ft						
-						
- 11 ft						
-						
- 12 ft						
-						
- 4 m 13 ft						

# WILDCAT DYNAMIC CONE LOG

Page 1 of 1

Leighton

PROJECT NUMBER: 12429.034  
DATE STARTED: 06-03-2023  
DATE COMPLETED: 06-03-2023

HOLE #: DCP-4  
CREW: CA  
PROJECT: CDC Shade Structure Project Grossmont High School  
ADDRESS: 1100 Murray Drive, El Cajon, California  
LOCATION: See Figure 2

SURFACE ELEVATION: 668' (msl)  
WATER ON COMPLETION: N/A  
HAMMER WEIGHT: 35 lbs.  
CONE AREA: 10 sq. cm

DEPTH	BLOWS PER 10 cm	RESISTANCE Kg/cm <sup>2</sup>	GRAPH OF CONE RESISTANCE 0 50 100 150	N'	TESTED CONSISTENCY	
					NON-COHESIVE	COHESIVE
-	7	31.1	.....	8	LOOSE	MEDIUM STIFF
-	8	35.5	.....	10	LOOSE	STIFF
- 1 ft	6	26.6	.....	7	LOOSE	MEDIUM STIFF
-	4	17.8	.....	5	LOOSE	MEDIUM STIFF
-	5	22.2	.....	6	LOOSE	MEDIUM STIFF
- 2 ft	11	48.8	.....	13	MEDIUM DENSE	STIFF
-	17	75.5	.....	21	MEDIUM DENSE	VERY STIFF
-	15	66.6	.....	19	MEDIUM DENSE	VERY STIFF
- 3 ft	50	222.0	.....	25+	VERY DENSE	HARD
- 1 m						
- 4 ft						
-						
- 5 ft						
-						
- 6 ft						
- 2 m						
- 7 ft						
-						
- 8 ft						
-						
- 9 ft						
- 3 m						
- 10 ft						
-						
- 11 ft						
-						
- 12 ft						
-						
- 4 m						
- 13 ft						

**Previous Exploration Logs  
(Kleinfelder, 2010)**

DATE DRILLED: 4/5/2010  
 DRILLING COMPANY: TRI-COUNTY DRILLING  
 DRILLING METHOD: CME-75, 140lb Auto Hammer, 30" Drop,  
 Hollow Stem Auger (HSA) & Air Rotary  
 HOLE DIAMETER: 8" HSA & 7" Air Hammer

WATER DEPTH: Not Encountered  
 DATE OBSERVED: 4/5/2010  
 GROUND ELEVATION: ± 667.5 Feet MSL\*  
 LOGGED BY: EK  
 REVIEWED BY: DH

ELEVATION (feet)	DEPTH (feet)	BULK SAMPLES	DRIVEN	BLOW COUNTS (blows/foot)	SAMPLE NUMBER	GRAPHIC LOG	SOIL DESCRIPTION AND CLASSIFICATION	DRY UNIT WEIGHT (pcf)	MOISTURE CONTENT (%)	COMMENTS/ ADDITIONAL TESTS
							3 inches of Asphalt Concrete			
							<b>ARTIFICIAL FILL (Qaf):</b>			
					1		Silty SAND (SM), brown, moist, loose to medium dense, fine to coarse grained sand, non-plastic, trace gravel and cobble			
-665				**50/6"	2					
							<b>POMERADO CONGLOMERATE (Tp):</b>			
							Drill action indicates presence of gravel/cobble at approximately 3 to 3-1/2 ft bgs			
	5			**50/6"	NR		No soil matrix recovered from the sampler, broken pieces of gravel/cobble			Switched to Air Rotary drilling method
-660							<b>MISSION VALLEY FORMATION (Tmv):</b>			
							Sandy SILT (ML), light brownish gray, moist, very stiff to hard, fine to medium grained sand, trace clay, Sandy SILTSTONE excavates as ML			
	10			64	3				11.9	
-655							<b>Fat CLAY (CH), light brownish gray, moist, hard, trace fine grained sand, high plasticity, CLAYSTONE excavates as CH</b>			
	15			37	4					
-650							<b>STADIUM CONGLOMERATE (Tst):</b>			
							Sandy SILT with Gravel (ML), light brownish gray, moist, hard, fine grained sand, fine to coarse grained gravel, abundant gravel/cobble			



PROJECT NO. 110515

CHILD DEVELOPMENT BUILDING  
 PHASE 1A IMPROVEMENTS  
 GROSSMONT HIGH SCHOOL  
 EL CAJON, CALIFORNIA  
 LOG OF BORING B-1

PLATE

A3

ELEVATION (feet)	DEPTH (feet)	SAMPLES		BLOW COUNTS (blows/foot)	SAMPLE NUMBER	GRAPHIC LOG	SOIL DESCRIPTION AND CLASSIFICATION  (Continued From Previous Page)	DRY UNIT WEIGHT (pcf)	MOISTURE CONTENT (%)	COMMENTS/ ADDITIONAL TESTS
		BULK	DRIVEN							
-645				**50/6"	5					
	25			**50/5"	6		Drill action indicates presence of gravel/cobble at approximately 24 to 30 ft bgs			
-640				**50/2"	NR					
-635	30						<p>* Elevations obtained from topography shown on "Phase 1A Grading and Drainage Plan-C3.1" dated 2/9/10, prepared by LPA Architecture.  ** Blowcount may not be representative due to gravel/cobble content.</p> <p>-Bottom of boring at approximately 30 ft bgs.  -No groundwater observed. Caving observed at approximately 7 ft bgs when augers were withdrawn.  -Boring backfilled with soil cuttings, bentonite chips, and patched at the surface with concrete on 4/5/10.</p>			
-630	35									
-625	40									
 PROJECT NO. 110515							CHILD DEVELOPMENT BUILDING PHASE 1A IMPROVEMENTS GROSSMONT HIGH SCHOOL EL CAJON, CALIFORNIA LOG OF BORING B-1			PLATE  <b>A4</b>

DATE DRILLED: 4/5/2010  
 DRILLING COMPANY: TRI-COUNTY DRILLING  
 DRILLING METHOD: CME-75, 140lb Auto Hammer, 30" Drop,  
 Hollow Stem Auger (HSA)  
 HOLE DIAMETER: 8" HSA

WATER DEPTH: Not Encountered  
 DATE OBSERVED: 4/5/2010  
 GROUND ELEVATION: ± 670 Feet MSL\*  
 LOGGED BY: EK  
 REVIEWED BY: DH

ELEVATION (feet)	DEPTH (feet)	SAMPLES BULK DRIVEN	BLOW COUNTS (blows/foot)	SAMPLE NUMBER	GRAPHIC LOG	SOIL DESCRIPTION AND CLASSIFICATION	DRY UNIT WEIGHT (pcf)	MOISTURE CONTENT (%)	COMMENTS/ ADDITIONAL TESTS
						3 inches of Asphalt Concrete			
				1		<b><u>ARTIFICIAL FILL (Qaf):</u></b>			
			16	2		Silty SAND (SM), brown to light brown, moist, loose to medium dense, fine to coarse grained sand, trace clay, non-plastic, 2-inch broken AC piece	96	7.6	
-665	5		16	3		trace fine grained gravel, 2-inch clay lumps, pieces of plastic and AC			
						Drill action indicates presence of gravel/cobble at approximately 7.5 ft bgs			
						<b><u>MISSION VALLEY FORMATION (Tmv):</u></b>			
-660	10		**50/3"	4		Sandy SILT (ML), light brownish gray, moist, very stiff, fine grained sand, trace clay, piece of broken rock in sampler shoe, Sandy SILTSTONE excavates as ML		33.1	
				5					
						<b><u>STADIUM CONGLOMERATE (Tst):</u></b>			
-655	15		**50/4"	NR		Drill action and cuttings indicate presence of gravel/cobble at approximately 13 ft bgs			
						No soil matrix recovered from the sampler, broken pieces of gravel/cobble			
-650	20					* Elevations obtained from topography shown on "Phase 1A Grading and Drainage Plan-C3.1" dated 2/9/10, prepared by LPA Architecture. ** Blowcount may not be representative due to gravel/cobble content. -Auger refusal at approximately 17 ft bgs on gravel/cobble. -No groundwater or caving observed. -Boring backfilled with soil cuttings, bentonite chips, and patched at the surface with asphalt on 4/5/10.			



PROJECT NO. 110515

CHILD DEVELOPMENT BUILDING  
 PHASE 1A IMPROVEMENTS  
 GROSSMONT HIGH SCHOOL  
 EL CAJON, CALIFORNIA  
 LOG OF BORING B-2

PLATE

A5

DATE DRILLED: 4/5/2010  
 DRILLING COMPANY: TRI-COUNTY DRILLING  
 DRILLING METHOD: CME-75, 140lb Auto Hammer, 30" Drop,  
 Hollow Stem Auger (HSA)  
 HOLE DIAMETER: 8" HSA

WATER DEPTH: Not Encountered  
 DATE OBSERVED: 4/5/2010  
 GROUND ELEVATION: ± 667.8 Feet MSL\*  
 LOGGED BY: EK  
 REVIEWED BY: DH

ELEVATION (feet)	DEPTH (feet)	BULK SAMPLES DRIVEN	BLOW COUNTS (blows/foot)	SAMPLE NUMBER	GRAPHIC LOG	SOIL DESCRIPTION AND CLASSIFICATION	DRY UNIT WEIGHT (pcf)	MOISTURE CONTENT (%)	COMMENTS/ ADDITIONAL TESTS
667	1	X				3 inches of Asphalt Concrete			
666	2	X	**50/3"	1 NR		<b>ARTIFICIAL FILL (Qaf):</b>  Silty SAND (SM), brown to light brown, moist, fine to coarse grained sand, non-plastic, trace gravel and cobble			
665	3	X				<b>POMERADO CONGLOMERATE (Tp):</b>  Drill action indicates presence of gravel/cobble at approximately 2 to 7 ft bgs			
664	4	X	**50/2"	NR		No soil matrix recovered from the sampler, broken pieces of gravel/cobble			
663	5	X		2					
662	6	X	**50/4"	NR					
661	7								
660	8								
659	9					* Elevations obtained from topography shown on "Phase 1A Grading and Drainage Plan-C3.1" dated 2/9/10, prepared by LPA Architecture. ** Blowcount may not be representative due to gravel/cobble content.			
658	10					-Auger refusal at approximately 7 ft bgs on gravel/cobble. -No groundwater or caving observed.			
657	11					-Boring backfilled with soil cuttings, bentonite chips, and patched at the surface with asphalt on 4/5/10.			
656	12								
655	13								
654	14								
653									



PROJECT NO. 110515

CHILD DEVELOPMENT BUILDING  
 PHASE 1A IMPROVEMENTS  
 GROSSMONT HIGH SCHOOL  
 EL CAJON, CALIFORNIA  
 LOG OF BORING B-3

PLATE

A6



## **APPENDIX C**

### **Laboratory Testing Procedures and Test Results**

## APPENDIX C

### Laboratory Testing Procedures and Test Results

Expansion Index Test: The expansion potential of a selected material was evaluated by the Expansion Index Test, ASTM Test Method D 4829. The specimen was molded under a given compactive energy to approximately 50 percent saturation. The prepared 1-inch thick by 4-inch diameter specimen was then loaded to an equivalent 144 psf surcharge and was inundated with water until volumetric equilibrium was reached. The result of this test is presented in the table below:

Sample Location	Description	Expansion Index	Expansion Potential
HA-2 @ 0.5-3 Feet	Clayey Sand with Gravel	16	Very Low

Soluble Sulfates: The soluble content of a selected sample was determined by standard geochemical methods. The test result is presented in the table below:

Sample Location	Sulfate Content (ppm)
HA-2 @ 0.5-3 Feet	<150

Chloride Content: Chloride content was tested in accordance with DOT Test Method No. 422. The result is presented below:

Sample Location	Chloride Content, ppm
HA-2 @ 0.5-3 Feet	80

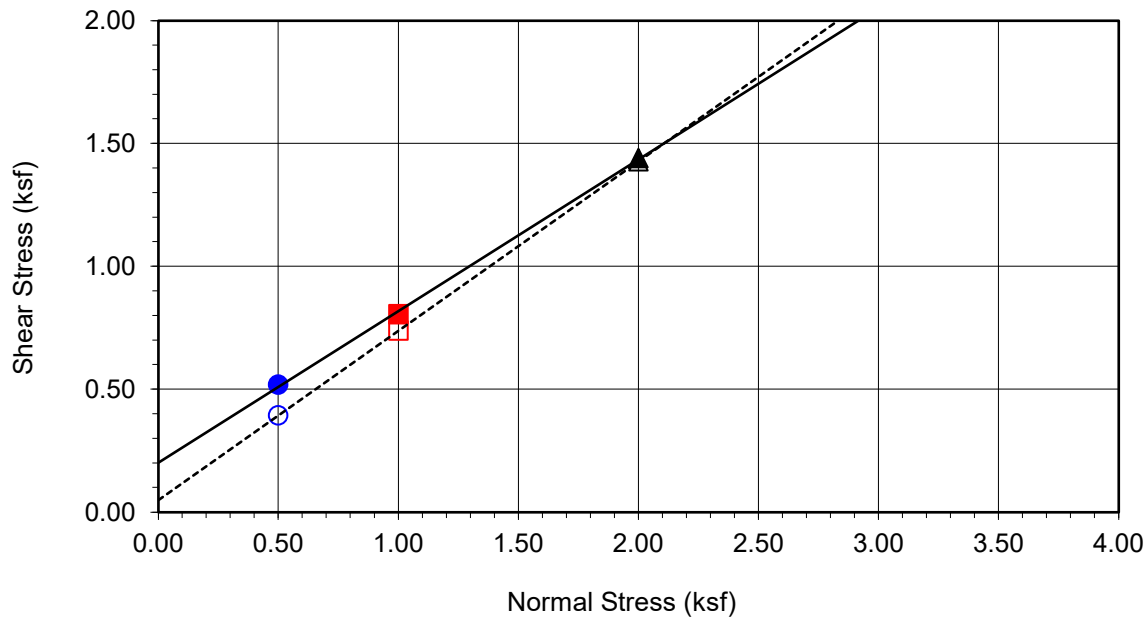
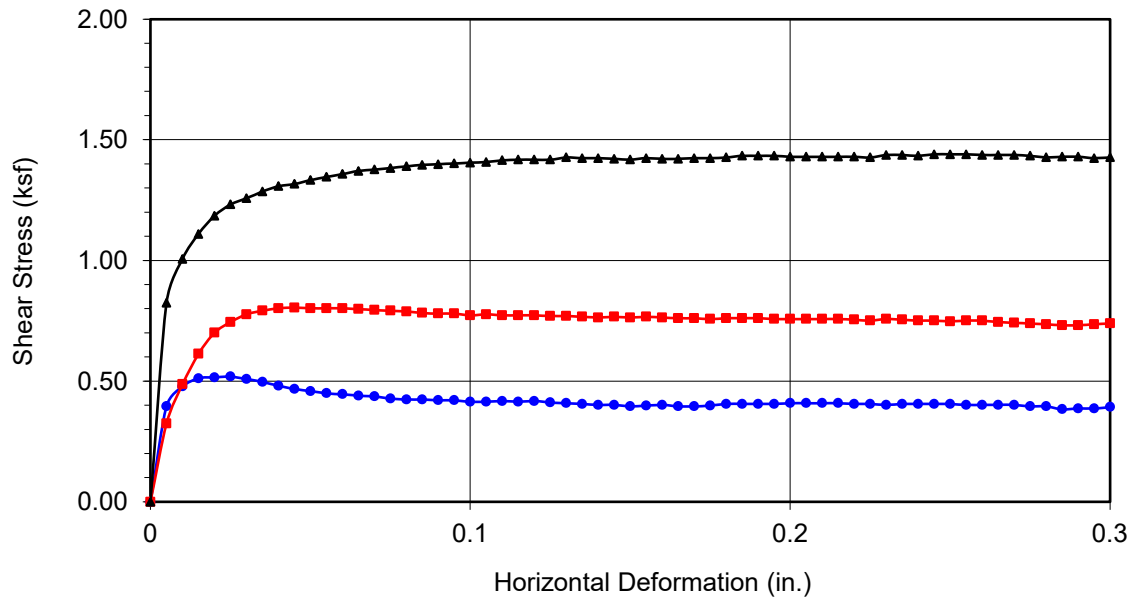
Minimum Resistivity and pH Tests: Minimum resistivity and pH tests were performed in general accordance with California Test Method 643. The results are presented in the table below:

Sample Location	pH	Minimum Resistivity (ohms-cm)
HA-2 @ 0.5-3 Feet	7.42	2,200

Maximum Density Tests: The maximum dry density and optimum moisture content of typical materials were determined in accordance with ASTM Test Method D 1557. The results of these tests are presented in the table below:

Sample Location	Sample Description	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
HA-3 @ 0.5-2 Feet	Clayey Sand with Gravel	128.0	9.0

Direct Shear Test: A direct shear test was performed on a selected remolded sample which was soaked for a minimum of 24 hours under a surcharge equal to the applied normal force during testing. After transfer of the sample to the shear box and reloading of the sample, the pore pressures set up in the sample (due to the transfer) were allowed to dissipate for a period of approximately 1 hour prior to application of shearing force. The sample was tested under various normal loads utilizing a motor-driven, strain-controlled, direct-shear testing apparatus at a strain rate of less 0.05 inches per minute. The test result is presented on the attached figure.



<b>Boring No.</b>	<b>HA-3</b>	
<b>Sample No.</b>	<b>B-1</b>	
<b>Depth (ft)</b>	<b>0.5-2.0</b>	
<u>Sample Type:</u> 90% Remold		
<u>Soil Identification:</u> Dark brown clayey sand with gravel (SC)g		
<b><u>Strength Parameters</u></b>		
	C (psf)	$\phi$ (°)
Peak	202	32
Ultimate	49	35

Normal Stress (kip/ft <sup>2</sup> )	0.500	1.000	2.000
Peak Shear Stress (kip/ft <sup>2</sup> )	● 0.519	■ 0.805	▲ 1.440
Shear Stress @ End of Test (ksf)	○ 0.393	□ 0.739	△ 1.427
Deformation Rate (in./min.)	0.0025	0.0025	0.0025
Initial Sample Height (in.)	1.000	1.000	1.000
Diameter (in.)	2.415	2.415	2.415
Initial Moisture Content (%)	8.80	8.80	8.80
Dry Density (pcf)	116.1	116.1	116.2
Saturation (%)	52.5	52.5	52.7
Soil Height Before Shearing (in.)	1.0037	0.9925	0.9872
Final Moisture Content (%)	16.4	15.9	14.9



## DIRECT SHEAR TEST RESULTS

Consolidated Drained - ASTM D 3080

Project No.: 12429.034

Grossmont High School CDC

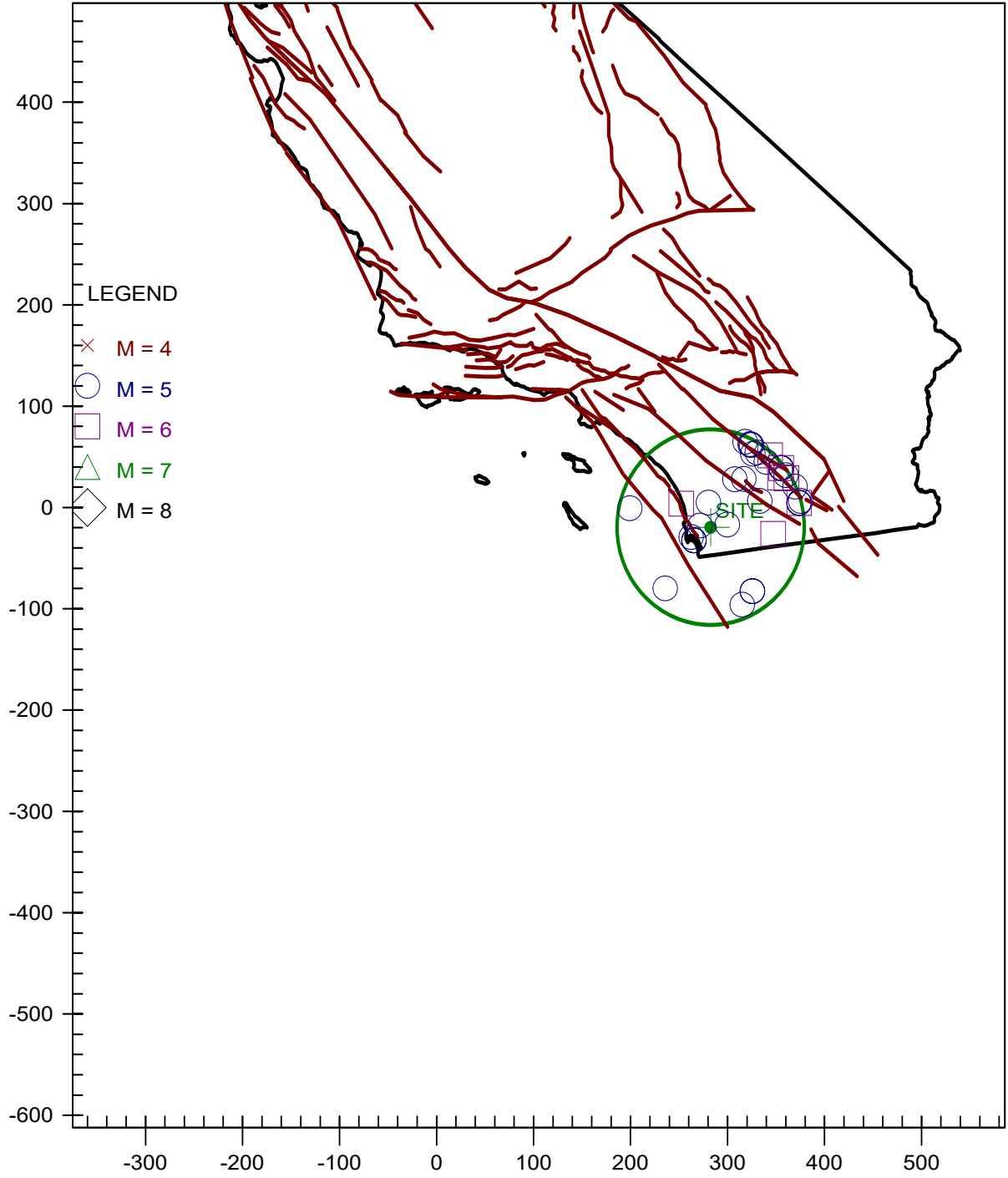
06-23

## **APPENDIX D**

### **Seismic Hazard Analysis**

# EARTHQUAKE EPICENTER MAP

GHS CDC Shade Structure



\*\*\*\*\*  
\*  
\* E Q S E A R C H \*  
\*  
\* Version 3.00 \*  
\*  
\*\*\*\*\*

ESTIMATION OF  
PEAK ACCELERATION FROM  
CALIFORNIA EARTHQUAKE CATALOGS

JOB NUMBER: 12429.034

DATE: 6-22-2023

JOB NAME: GHS CDC Shade Structure Project

MAGNITUDE RANGE:

MINIMUM MAGNITUDE: 5.00

MAXIMUM MAGNITUDE: 9.00

SITE COORDINATES:

SITE LATITUDE: 32.7814

SITE LONGITUDE: 116.9846

SEARCH DATES:

START DATE: 1800

END DATE: 2023

SEARCH RADIUS:

60.0 mi

96.6 km

ATTENUATION RELATION: 2) Boore et al. (1997) Horiz. - NEHRP C (520)

UNCERTAINTY (M=Median, S=Sigma): M Number of Sigmas: 0.0

ASSUMED SOURCE TYPE: SS [SS=Strike-slip, DS=Reverse-slip, BT=Blind-thrust]

SCOND: 0 Depth Source: A

Basement Depth: 5.00 km Campbell SSR: Campbell SHR:

COMPUTE PEAK HORIZONTAL ACCELERATION

MINIMUM DEPTH VALUE (km): 0.0

-----  
EARTHQUAKE SEARCH RESULTS  
-----

FILE	LAT.	LONG.	DATE	TIME (UTC)	DEPTH	QUAKE	SITE	SITE	APPROX.
CODE	NORTH	WEST		H M Sec	(km)	MAG.	ACC.	MM	DISTANCE
							g	INT.	mi [km]
MGI	32.8000	117.1000	05/25/1803	0 0 0.0	0.0	5.00	0.088	VII	6.8 ( 11.0)
DMG	32.8000	116.8000	10/23/1894	23 3 0.0	0.0	5.70	0.094	VII	10.8 ( 17.4)
T-A	32.6700	117.1700	05/24/1865	0 0 0.0	0.0	5.00	0.056	VI	13.2 ( 21.3)
T-A	32.6700	117.1700	12/00/1856	0 0 0.0	0.0	5.00	0.056	VI	13.2 ( 21.3)
T-A	32.6700	117.1700	10/21/1862	0 0 0.0	0.0	5.00	0.056	VI	13.2 ( 21.3)
DMG	32.7000	117.2000	05/27/1862	20 0 0.0	0.0	5.90	0.088	VII	13.7 ( 22.1)
MGI	33.0000	117.0000	09/21/1856	730 0.0	0.0	5.00	0.051	VI	15.1 ( 24.3)
DMG	33.0000	117.3000	11/22/1800	2130 0.0	0.0	6.50	0.080	VII	23.7 ( 38.1)
DMG	33.2000	116.7000	01/01/1920	235 0.0	0.0	5.00	0.028	V	33.3 ( 53.5)
DMG	33.0000	116.4330	06/04/1940	1035 8.3	0.0	5.10	0.028	V	35.4 ( 56.9)
MGI	33.2000	116.6000	10/12/1920	1748 0.0	0.0	5.30	0.031	V	36.5 ( 58.7)
DMG	32.7000	116.3000	02/24/1892	720 0.0	0.0	6.70	0.059	VI	40.1 ( 64.6)
T-A	32.2500	117.5000	01/13/1877	20 0 0.0	0.0	5.00	0.021	IV	47.4 ( 76.3)
DMG	32.2000	116.5500	11/05/1949	43524.0	0.0	5.10	0.022	IV	47.5 ( 76.4)
DMG	32.2000	116.5500	11/04/1949	204238.0	0.0	5.70	0.031	V	47.5 ( 76.4)
DMG	32.0830	116.6670	11/25/1934	818 0.0	0.0	5.00	0.020	IV	51.6 ( 83.1)
GSG	33.4200	116.4890	07/07/2010	235333.5	14.0	5.50	0.026	V	52.6 ( 84.6)
PAS	32.9710	117.8700	07/13/1986	1347 8.2	6.0	5.30	0.023	IV	53.0 ( 85.3)
DMG	33.3430	116.3460	04/28/1969	232042.9	20.0	5.80	0.030	V	53.6 ( 86.2)
DMG	33.2000	116.2000	05/28/1892	1115 0.0	0.0	6.30	0.038	V	53.8 ( 86.7)
GSP	33.4315	116.4427	06/10/2016	080438.7	12.3	5.19	0.021	IV	54.7 ( 88.1)
PAS	33.5010	116.5130	02/25/1980	104738.5	13.6	5.50	0.024	V	56.7 ( 91.2)
GSP	33.5290	116.5720	06/12/2005	154146.5	14.0	5.20	0.021	IV	56.9 ( 91.5)
DMG	33.5000	116.5000	09/30/1916	211 0.0	0.0	5.00	0.018	IV	57.0 ( 91.7)
DMG	33.1900	116.1290	04/09/1968	22859.1	11.1	6.40	0.039	V	57.0 ( 91.8)
GSP	33.5080	116.5140	10/31/2001	075616.6	15.0	5.10	0.019	IV	57.1 ( 91.8)
DMG	33.2170	116.1330	08/15/1945	175624.0	0.0	5.70	0.026	V	57.8 ( 92.9)
DMG	33.2830	116.1830	03/23/1954	41450.0	0.0	5.10	0.019	IV	57.9 ( 93.2)
DMG	33.2830	116.1830	03/19/1954	102117.0	0.0	5.50	0.024	IV	57.9 ( 93.2)
DMG	33.2830	116.1830	03/19/1954	95556.0	0.0	5.00	0.018	IV	57.9 ( 93.2)
DMG	33.2830	116.1830	03/19/1954	95429.0	0.0	6.20	0.034	V	57.9 ( 93.2)



-----  
EARTHQUAKE SEARCH RESULTS  
-----

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC) H M Sec	DEPTH (km)	QUAKE MAG.	ACC. g	SITE MM INT.	SITE MM INT.	APPROX. DISTANCE mi [km]
DMG	33.4000	116.3000	02/09/1890	12 6 0.0	0.0	6.30	0.036	V		58.2 ( 93.7)
DMG	32.9670	116.0000	10/21/1942	162519.0	0.0	5.00	0.018	IV		58.5 ( 94.2)
DMG	32.9670	116.0000	10/22/1942	181326.0	0.0	5.00	0.018	IV		58.5 ( 94.2)
DMG	32.9670	116.0000	10/21/1942	162654.0	0.0	5.00	0.018	IV		58.5 ( 94.2)
DMG	32.9670	116.0000	10/21/1942	162213.0	0.0	6.50	0.040	V		58.5 ( 94.2)
DMG	33.1130	116.0370	04/09/1968	3 353.5	5.0	5.20	0.020	IV		59.5 ( 95.7)
DMG	32.9830	115.9830	05/23/1942	154729.0	0.0	5.00	0.018	IV		59.7 ( 96.1)

\*\*\*\*\*

-END OF SEARCH- 38 EARTHQUAKES FOUND WITHIN THE SPECIFIED SEARCH AREA.

TIME PERIOD OF SEARCH: 1800 TO 2023

LENGTH OF SEARCH TIME: 224 years

THE EARTHQUAKE CLOSEST TO THE SITE IS ABOUT 6.8 MILES (11.0 km) AWAY.

LARGEST EARTHQUAKE MAGNITUDE FOUND IN THE SEARCH RADIUS: 6.7

LARGEST EARTHQUAKE SITE ACCELERATION FROM THIS SEARCH: 0.094 g

COEFFICIENTS FOR GUTENBERG & RICHTER RECURRENCE RELATION:

a-value= 0.875

b-value= 0.375

beta-value= 0.863

-----  
 TABLE OF MAGNITUDES AND EXCEEDANCES:  
 -----

Earthquake	Number of Times	Cumulative
Magnitude	Exceeded	No. / Year
-----+-----+-----		
4.0	38	0.17040
4.5	38	0.17040
5.0	38	0.17040
5.5	15	0.06726
6.0	7	0.03139
6.5	3	0.01345

## **APPENDIX E**

### **General Earthwork and Grading Specifications**

## 1.0 General

### 1.1 Intent

These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

### 1.2 The Geotechnical Consultant of Record

Prior to commencement of work, the owner shall employ the Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultants shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

### 1.3 The Earthwork Contractor

The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

## 2.0 Preparation of Areas to be Filled

### 2.1 Clearing and Grubbing

Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

## 2.2 Processing

Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

## 2.3 Overexcavation

In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.

## 2.4 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

## 2.5 Evaluation/Acceptance of Fill Areas

All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant

prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

### 3.0 Fill Material

#### 3.1 General

Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

#### 3.2 Oversize

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

#### 3.3 Import

If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

### 4.0 Fill Placement and Compaction

#### 4.1 Fill Layers

Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

#### 4.2 Fill Moisture Conditioning

Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557).

#### 4.3 Compaction of Fill

After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

#### 4.4 Compaction of Fill Slopes

In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557.

#### 4.5 Compaction Testing

Field-tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

#### 4.6 Frequency of Compaction Testing

Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.



#### 4.7 Compaction Test Locations

The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

#### 5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

#### 6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

#### 7.0 Trench Backfills

##### 7.1 Safety

The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations.

7.2 Bedding and Backfill

All bedding and backfill of utility trenches shall be performed in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified. Backfill shall be placed and densified to a minimum of 90 percent of relative compaction from 1 foot above the top of the conduit to the surface.

The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

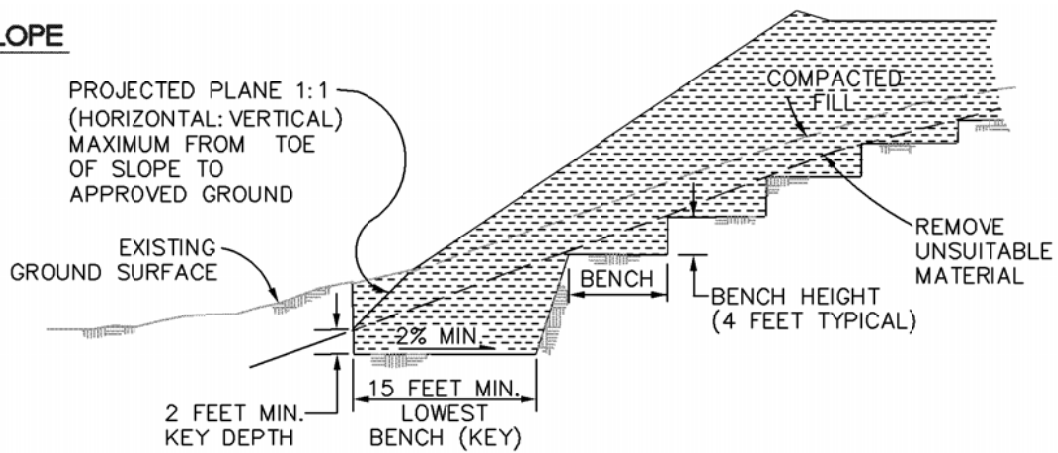
7.3 Lift Thickness

Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

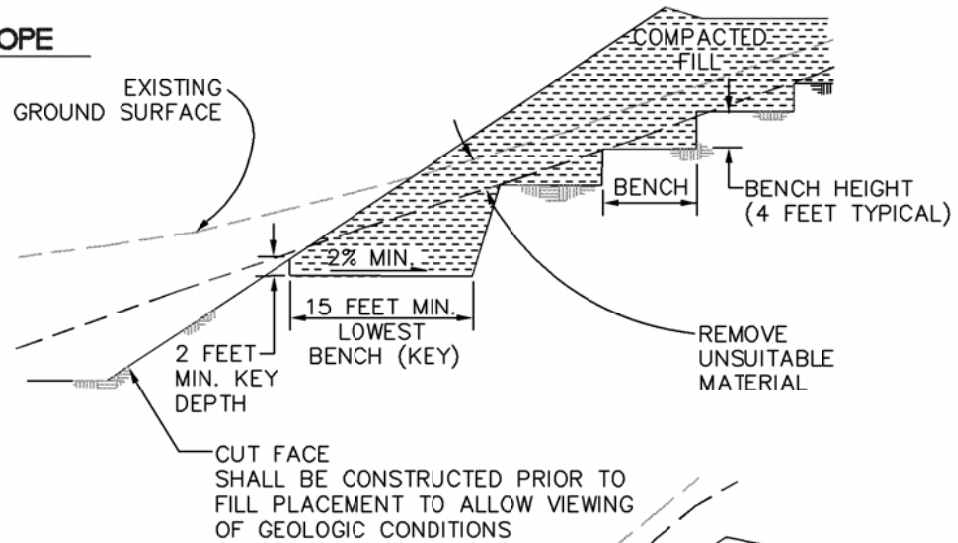
7.4 Observation and Testing

The densification of the bedding around the conduits shall be observed by the Geotechnical Consultant.

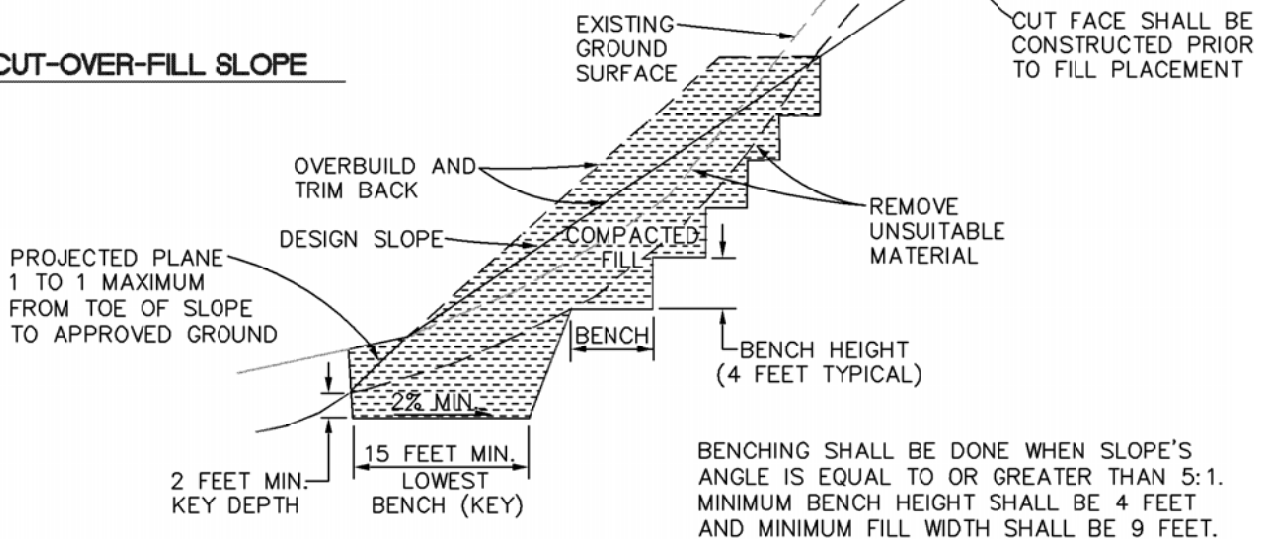
## FILL SLOPE



## FILL-OVER-CUT SLOPE



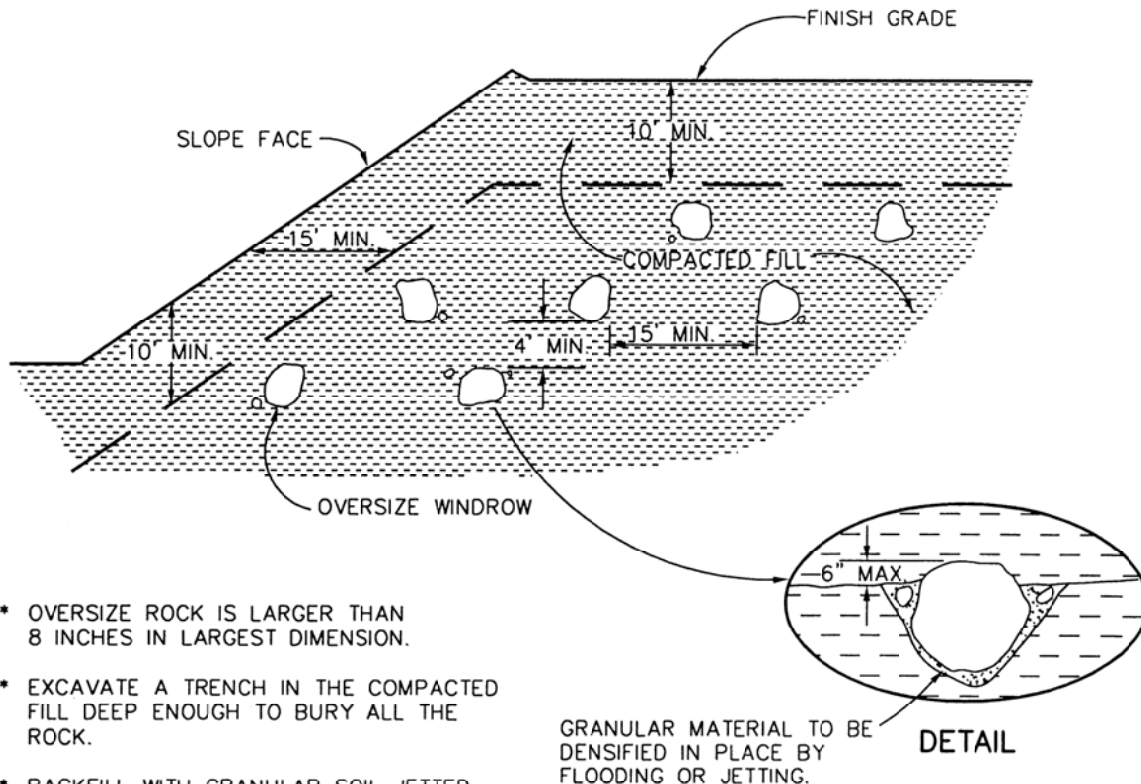
## CUT-OVER-FILL SLOPE



# KEYING AND BENCHING

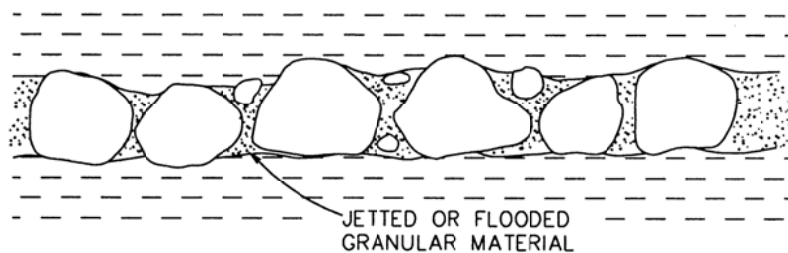
GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL A





- \* OVERSIZE ROCK IS LARGER THAN 8 INCHES IN LARGEST DIMENSION.
- \* EXCAVATE A TRENCH IN THE COMPACTED FILL DEEP ENOUGH TO BURY ALL THE ROCK.
- \* BACKFILL WITH GRANULAR SOIL JETTED OR FLOODED IN PLACE TO FILL ALL THE VOIDS.
- \* DO NOT BURY ROCK WITHIN 10 FEET OF FINISH GRADE.
- \* WINDROW OF BURIED ROCK SHALL BE PARALLEL TO THE FINISHED SLOPE.

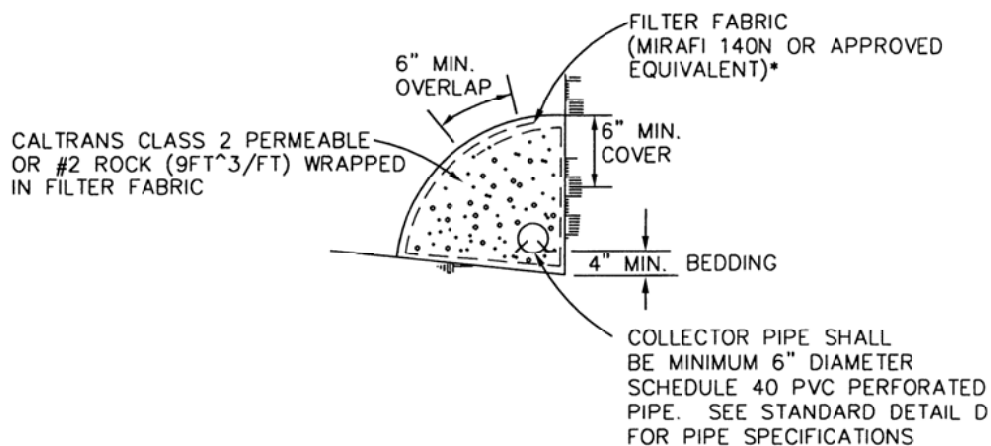
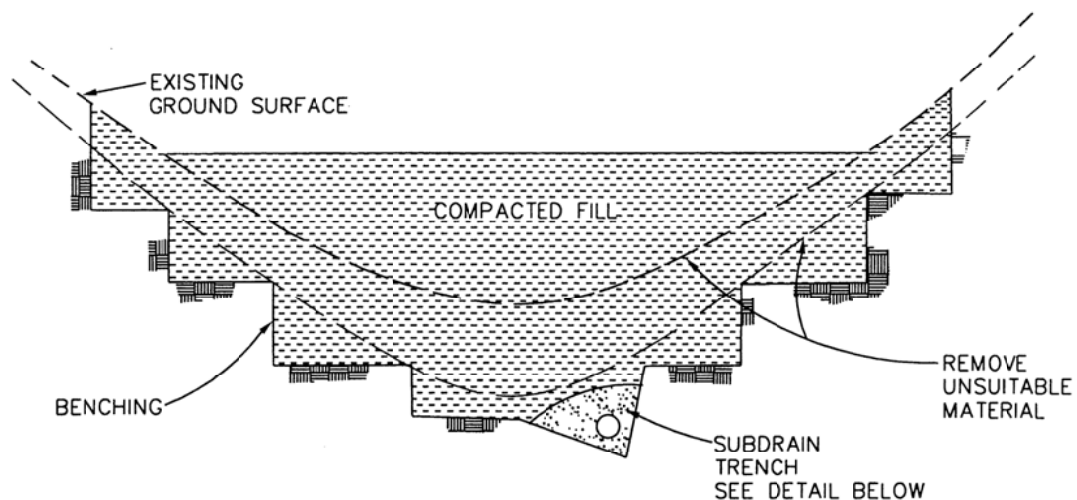
GRANULAR MATERIAL TO BE DENSIFIED IN PLACE BY FLOODING OR JETTING.



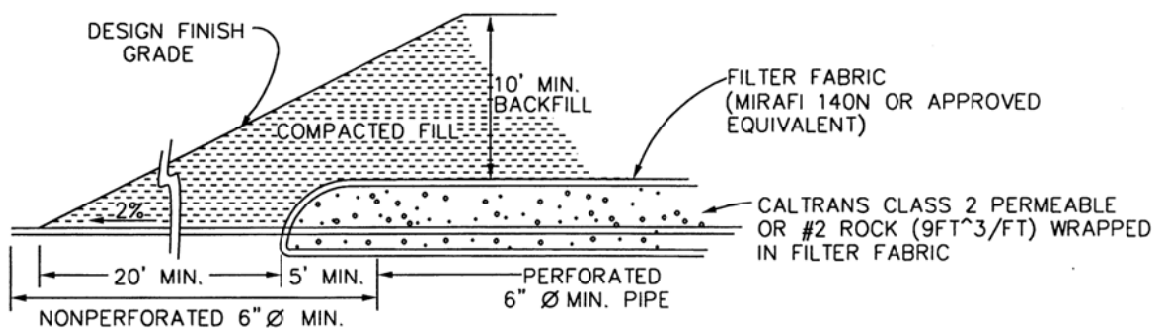
TYPICAL PROFILE ALONG WINDROW

## OVERSIZE ROCK DISPOSAL

GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL B



### SUBDRAIN DETAIL

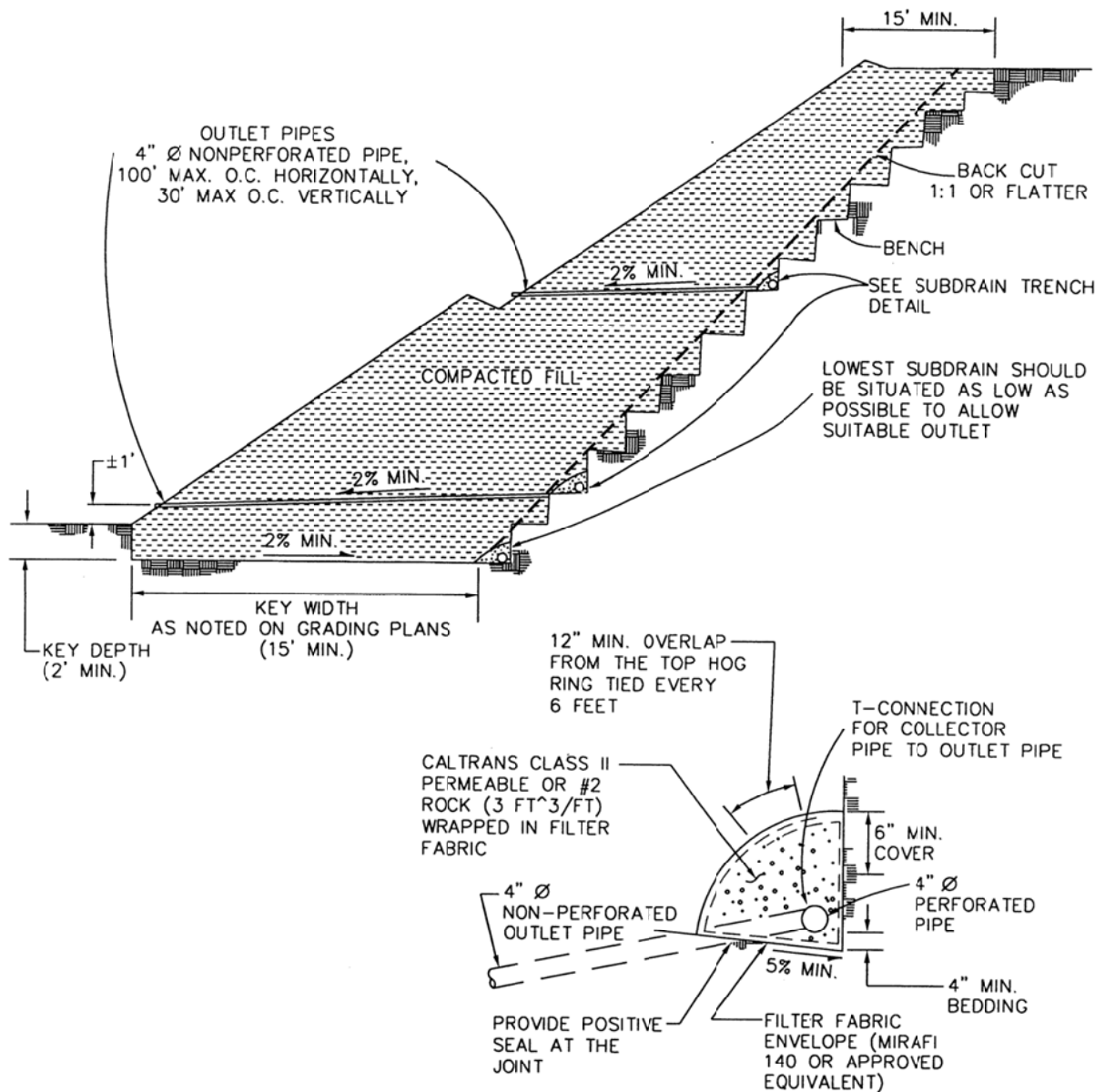


### DETAIL OF CANYON SUBDRAIN OUTLET

## CANYON SUBDRAINS

GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL C





### SUBDRAIN TRENCH DETAIL

**SUBDRAIN INSTALLATION** – subdrain collector pipe shall be installed with perforation down or, unless otherwise designated by the geotechnical consultant. Outlet pipes shall be non-perforated pipe. The subdrain pipe shall have at least 8 perforations uniformly spaced per foot. Perforation shall be 1/4" to 1/2" if drill holes are used. All subdrain pipes shall have a gradient of at least 2% towards the outlet.

**SUBDRAIN PIPE** – Subdrain pipe shall be ASTM D2751, SDR 23.5 or ASTM D1527, Schedule 40, or ASTM D3034, SDR 23.5, Schedule 40 Polyvinyl Chloride Plastic (PVC) pipe.

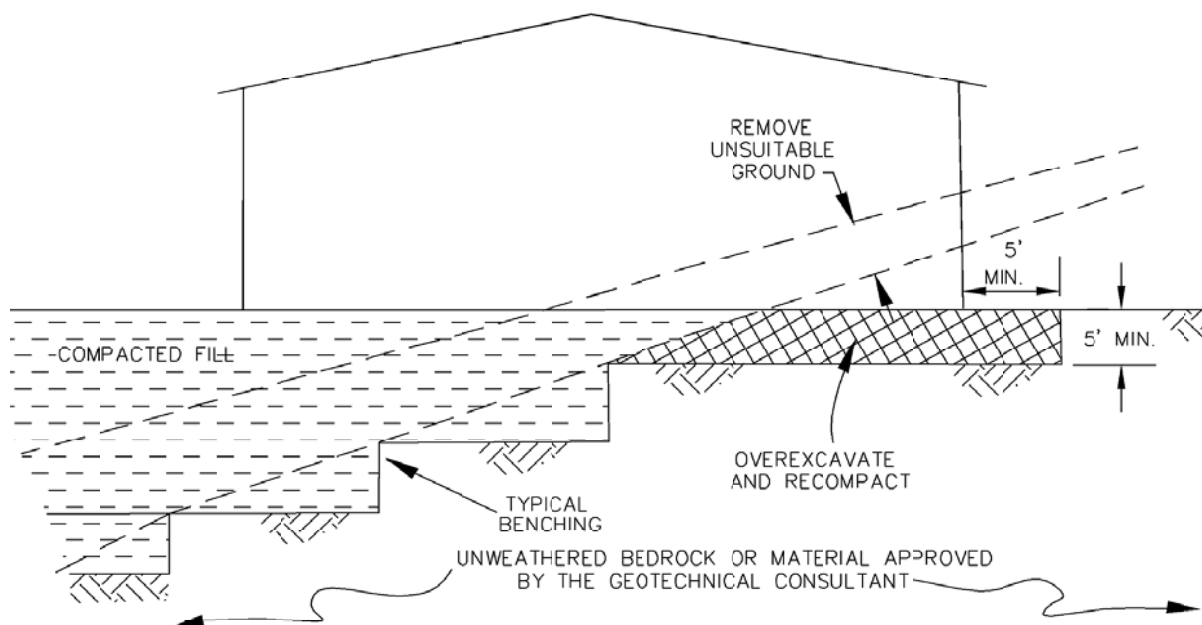
All outlet pipe shall be placed in a trench no wider than twice the subdrain pipe.

**BUTTRESS OR  
REPLACEMENT  
FILL SUBDRAINS**

**GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL D**



### CUT-FILL TRANSITION LOT OVEREXCAVATION

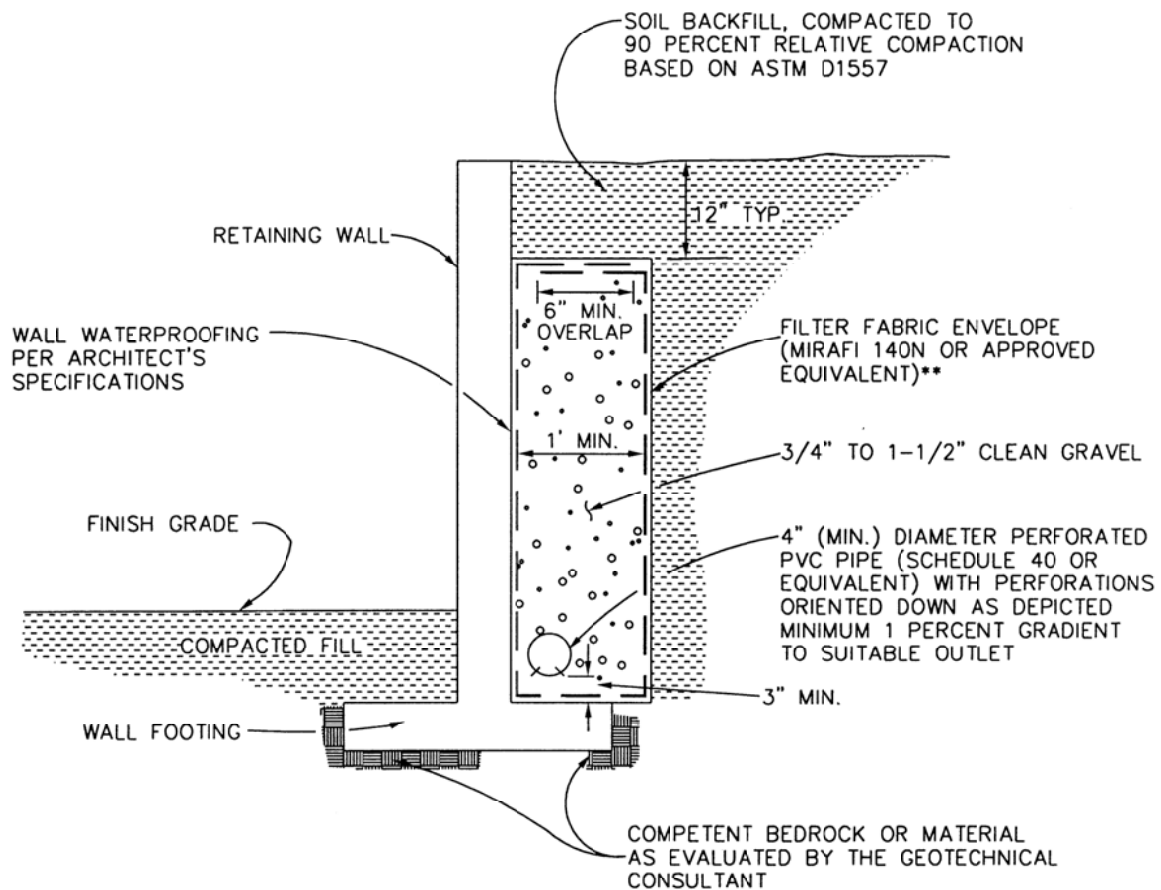


TRANSITION LOT FILLS

GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL E







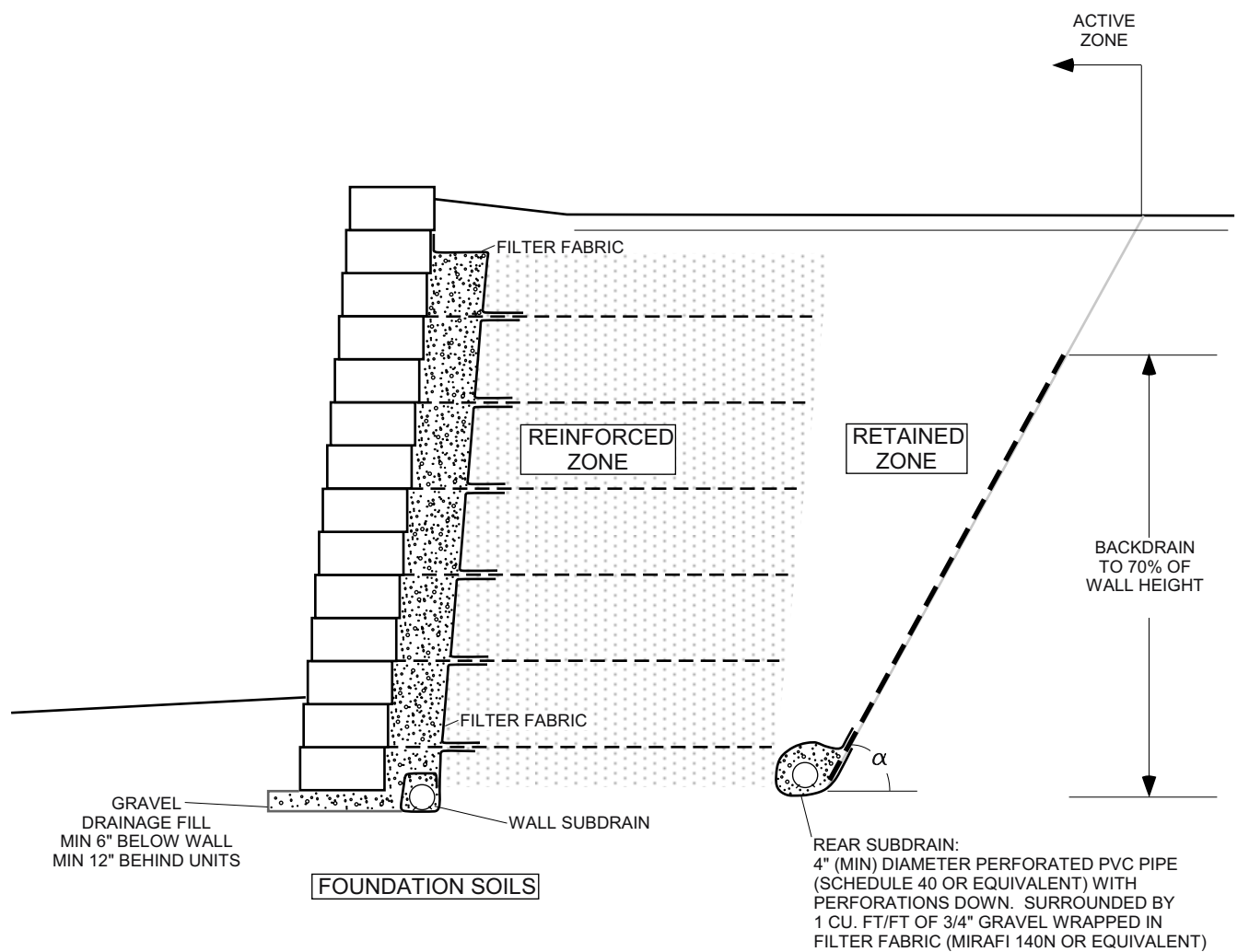
NOTE: UPON REVIEW BY THE GEOTECHNICAL CONSULTANT, COMPOSITE DRAINAGE PRODUCTS SUCH AS MIRADRAIN OR J-DRAIN MAY BE USED AS AN ALTERNATIVE TO GRAVEL OR CLASS 2 PERMEABLE MATERIAL. INSTALLATION SHOULD BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

## RETAINING WALL DRAINAGE

GENERAL EARTHWORK AND  
GRADING SPECIFICATIONS  
STANDARD DETAIL F







NOTES:

1) MATERIAL GRADATION AND PLASTICITY  
REINFORCED ZONE:

SIEVE SIZE	% PASSING
1 INCH	100
NO. 4	20-100
NO. 40	0-60
NO. 200	0-35

FOR WALL HEIGHT < 10 FEET, PLASTICITY INDEX < 20  
FOR WALL HEIGHT 10 TO 20 FEET, PLASTICITY INDEX < 10  
FOR TIERED WALLS, USE COMBINED WALL HEIGHTS  
WALL DESIGNER TO REQUEST SITE-SPECIFIC CRITERIA FOR WALL HEIGHT > 20 FEET

GRAVEL DRAINAGE FILL:

SIEVE SIZE	% PASSING
1 INCH	100
3/4 INCH	75-100
NO. 4	0-60
NO. 40	0-50
NO. 200	0-5

OUTLET SUBDRAINS EVERY 100 FEET, OR CLOSER, BY TIGHTLINE TO SUITABLE PROTECTED OUTLET

- CONTRACTOR TO USE SOILS WITHIN THE RETAINED AND REINFORCED ZONES THAT MEET THE STRENGTH REQUIREMENTS OF WALL DESIGN.
- GEOGRID REINFORCEMENT TO BE DESIGNED BY WALL DESIGNER CONSIDERING INTERNAL, EXTERNAL, AND COMPOUND STABILITY.
- GEOGRID TO BE PRETENSIONED DURING INSTALLATION.
- IMPROVEMENTS WITHIN THE ACTIVE ZONE ARE SUSCEPTIBLE TO POST-CONSTRUCTION SETTLEMENT. ANGLE  $\alpha = 45 + \phi/2$ , WHERE  $\phi$  IS THE FRICTION ANGLE OF THE MATERIAL IN THE RETAINED ZONE.
- BACKDRAIN SHOULD CONSIST OF J-DRAIN 302 (OR EQUIVALENT) OR 6-INCH THICK DRAINAGE FILL WRAPPED IN FILTER FABRIC. PERCENT COVERAGE OF BACKDRAIN TO BE PER GEOTECHNICAL REVIEW.

# SEGMENTAL RETAINING WALLS

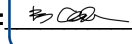
## GENERAL EARTHWORK AND GRADING SPECIFICATIONS STANDARD DETAIL G



## APPLICATION FOR SUBMITTAL OF POST-APPROVAL DOCUMENT

This application is for submittal of documents, after the initial approval of the project (post-approval documents), that require Division of the State Architect (DSA) review and approval. This form shall be completed by the Design Professional in General Responsible Charge of the project, in accordance with California Code of Regulations, Title 24, Part 1, Sections 4-317, 4-323 and 4-338 and in compliance with DSA IR A-6: Construction Change Document Submittal and Approval Process.

DSA documents referenced within this form are available on the [DSA Forms](#) or [DSA Publications](#) webpages.

<b>1. SUBMITTAL TYPE: (Is this a resubmittal? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>)</b>			
Deferred Submittal <input type="checkbox"/>	Addendum Number: <b>01</b>	Revision Number:	CCD Number: Category A <input type="checkbox"/> or B <input type="checkbox"/>
<b>2. PROJECT INFORMATION:</b>			
School District/Owner: <b>Grossmont UHSD</b>		DSA File Number: <b>37 H4</b>	
Project Name/School: <b>Child Care Shade Structure</b>		DSA Application Number <b>04 121137</b>	
<b>3. APPLICANT INFORMATION:</b>			
Date Submitted: <b>08/09/23</b>		Attached Pages? No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Number of pages? <b>65</b>	
Firm Name: <b>Ruhnau Clarke Architects</b>		Contact Name: <b>Krys Thompson</b>	
Work Email: <b>dsa@ruhnauclarke.com</b>		Work Phone: <b>(951) 684-4664</b>	
Firm Address: <b>3775 Tenth Street</b>		City: <b>Riverside</b>	State: <b>CA</b> Zip Code: <b>92501</b>
<b>4. REASON FOR SUBMITTAL: (Check applicable boxes)</b>			
<input checked="" type="checkbox"/> For revision or addendum prior to construction.		<input type="checkbox"/> For a project currently under construction.	
<input type="checkbox"/> For a project that has a form DSA 301-N: Notification of Requirement for Certification, DSA 301-P: Posted Notification of Requirement for Certification or a 90-Day Letter issued.			
<input type="checkbox"/> To obtain DSA approval of an existing uncertified building or buildings.			
<input type="checkbox"/> For Category B CCD this is: <input type="checkbox"/> a voluntary submittal, <input type="checkbox"/> a DSA required submittal (attach DSA notice requiring submission).			
<b>5. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE:</b>			
Name of the Design Professional In General Responsible Charge: <b>Roger Clarke</b>			
Professional License Number: <b>C-21340</b>		Discipline: <b>Architect</b>	
<b>Design Professional in General Responsible Charge Statement:</b> The attached post-approval documents have been examined by me for design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications. They are acceptable for incorporation into the construction of the project. <b>Signature:</b>  _____ <small>AA344130CD3943C... DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE</small>			
<b>6. CONFIRMATION, DESCRIPTION AND LISTING OF DOCUMENTS:</b>			
For addenda, revisions, or CCDs: CHECK THIS BOX <input checked="" type="checkbox"/> to confirm that <i>all</i> post-approval documents have been stamped and signed by the Responsible Design Professional listed on form DSA 1: Application for Approval of Plans and Specifications for this project. (For Deferred Submittals, refer to IR A-18: Use of Construction Documents Prepared by Other Professionals, and IR A-19: Design Professional's Signature and Seal (Stamp) on Construction Documents, when applicable, for signature and seal requirements.)			
Provide a brief description of construction scope for this post-approval document (attach additional sheets if needed): <b>Please see attached narrative for description of changes</b>			
List of DSA-approved drawings affected by this post-approval document: <b>AS-2.0</b>			

DSA USE ONLY		
SSS <b>GL</b> Date <b>08/11/2023</b> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Not Required Comments: _____  FLS _____ Date _____ <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input checked="" type="checkbox"/> Not Required Comments: _____  ACS <b>SL</b> Date <b>08/14/2023</b> <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved <input type="checkbox"/> Not Required Comments: _____	<b>Returned</b> Date: <b>08/15/2023</b> By: <b>DP</b>	<b>DSA STAMP</b> <div style="border: 2px solid black; border-radius: 15px; padding: 10px; margin: 10px auto; width: 80%;"> APPROVED  DIV. OF THE STATE ARCHITECT  APP: 04-121137 INC:  REVIEWED FOR  SS <input checked="" type="checkbox"/> FLS <input type="checkbox"/> ACS <input checked="" type="checkbox"/>  DATE: <b>08/14/2023</b> </div>



Aug 09, 2023

# ADDENDUM NO. 1

TO THE CONTRACT DOCUMENTS

**FOR**

CHILDCARE CENTER SHADE STRUCTURE

**FOR THE**

GROSSMONT UNION HIGH SCHOOL DISTRICT  
1100 Murray Drive  
El Cajon, CA 91944

DSA #04-121137      FILE #37-H4      RCA Project No. 1-30-65

## **NOTICE TO BIDDERS**

This Addendum forms a part of the Contract and modifies the original documents of DSA Approved on August 31, 2022. It is intended that all work affected by the following modifications shall conform with related provisions and general conditions of the contract of the original drawings and specifications. Modify the following items wherever appearing in any drawing or sections of the specifications. Acknowledge receipt of Addendum No. 1 in the space provided on the Bid Form. Failure to do so may subject bidder to disqualification.

## **CHANGES TO THE SPECIFICATIONS**

- |              |   |
|--------------|---|
| Item No. 1.1 | Reference Section 00 01 10 - Table of Contents.                   |
| 1.1.1        | Replace section with attached section 00 01 10 - in its entirety. |
| Item No. 1.2 | Reference Section 00 31 00 - Available Project Information        |
| 1.2.1        | New section 00 31 00 added.                                       |
| Item No. 1.3 | Reference Section 02 41 00 - Demolition.                          |
| 1.3.1        | Replace section with attached section 02 41 00 - in its entirety. |
| Item No. 1.4 | Reference Section 31 22 00 - Grading.                             |
| 1.4.1        | New section 31 22 00 added.                                       |
| Item No. 1.5 | Reference Section 31 23 16 - Excavation.                          |
| 1.5.1        | Replace section with attached section 31 23 16 - in its entirety. |
| Item No. 1.6 | Reference Section 31 23 23 - Fill.                                |
| 1.6.1        | Replace section with attached section 31 23 23 - in its entirety. |
| Item No. 1.7 | Reference Section 31 63 29 - Drilled Concrete Piers and Shafts.   |
| 1.7.1        | Replace section with attached section 31 63 29 - in its entirety. |

- Item No. 1.8      Reference Section 32 13 13 – Site Concrete.  
1.8.1      New section 32 13 13 added.
- Item No. 1.9      Reference Section 32 18 16.13 – Playground Protective Surfacing.  
1.9.1      New section 32 18 16.13 added.
- Item No. 1.10      Reference Section 33 42 11 – Stormwater Gravity Piping.  
1.10.1      New section 33 42 11 added.
- Item No. 1.11      Reference Section 33 42 30 – Stormwater Drains.  
1.11.1      New section 33 42 30 added.

#### ARCHITECTURAL DRAWINGS

- Item No. 1.12      Reference Drawing Sheet AS-2.0 – ENLARGED SITE PLANS  
1.12.1      Revise landscaping areas of rubber mat surface and artificial turf per attached Drawings ASK1.01.
- Item No. 1.13      Reference Drawing Sheet AS-2.0 – ENLARGED SITE PLANS  
1.13.1      Revise landscaping areas of rubber mat surface and artificial turf per attached Drawings ASK1.02.
- Item No. 1.14      Reference Drawing Sheet AS-2.0 – ENLARGED SITE PLANS  
1.14.1      Revise 'LEGEND' per attached Drawing ASK1.03.
- Item No. 1.15      Reference Drawing Sheet AS-2.0 – ENLARGED SITE PLANS  
1.15.1      New 'Rubber Mat Transition' detail per attached Drawing ASK1.04.

#### **ATTACHMENTS** **Specifications**

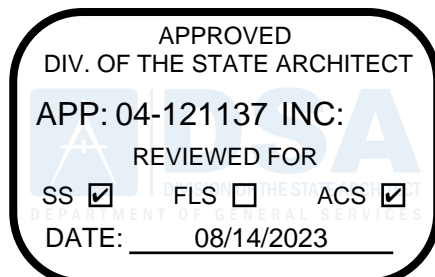
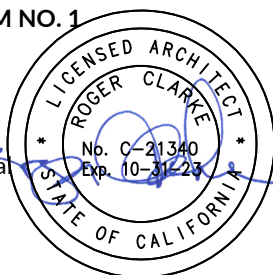
00 01 10, 00 31 00, 02 41 00, 31 22 00, 31 23 16, 31 23 23, 31 63 29, 32 13 13, 32 18 16.13, 33 42 11, and 33 42 30.

#### **Sketches**

ASK1.01, ASK1.02, ASK1.03, and ASK1.04.

#### **END OF ADDENDUM NO. 1**

-----  
Roger Clarke, Principal  
#C-21340



**SECTION 00 01 10  
TABLE OF CONTENTS**

**PROCUREMENT AND CONTRACTING REQUIREMENTS**

**DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS**

00 01 01 - Project Title Page	
00 01 02 - Project Information	
00 01 07 - Seals Page	
00 01 10 - Table of Contents	<b>Addendum 1</b>
<b>00 31 00 - Available Project Information (New Section)</b>	<b>Addendum 1</b>
00 40 25 - Request for Information	
00 43 25 - Substitution Request Form - During Procurement	
00 63 25 - Substitution Request Form - During Construction	

**SPECIFICATIONS**

**DIVISION 01 -- GENERAL REQUIREMENTS**

01 10 00 - Summary	
01 20 00 - Price and Payment Procedures	
01 25 00 - Substitution Procedures	
01 30 00 - Administrative Requirements	
01 30 00.01 - Request for Interpretation	
01 30 00.02 - Submittal Transmittal	
01 35 50 - Requests for Electronic Files	
01 35 53 - Security Procedures	
01 40 00 - Quality Requirements	
01 41 00 - Regulatory Requirements	
01 45 33 - Code-Required Special Inspections	
01 50 00 - Temporary Facilities and Controls	
01 60 00 - Product Requirements	
01 61 16 - Volatile Organic Compound (VOC) Content Restrictions	
01 61 16.01 - Accessory Material VOC Content Certification Form	
01 70 00 - Execution and Closeout Requirements	
01 71 23 - Field Engineering	
01 74 19 - Construction Waste Management and Disposal	
01 78 00 - Closeout Submittals	

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Table of Contents 00 01 10 - 1
--	-------------------	-----------------------------------

01 78 00.01-Warranty Form Letter  
01 78 39 - Project Record Documents

**DIVISION 02 -- EXISTING CONDITIONS**

02 41 00 -- Demolition

**Addendum 1**

**DIVISION 03 -- CONCRETE**

03 30 00 - Cast-in-Place Concrete

**DIVISION 05 -- METALS**

05 50 00 - Metal Fabrications

**DIVISION 13 -- SPECIAL CONSTRUCTION**

13 31 33 - Pre-Engineered Fabric Shade Structures

**DIVISION 31 -- EARTHWORK**

**31 22 00 -- Grading (New Section)**

**Addendum 1**

31 23 16 - Excavation

**Addendum 1**

31 23 23 - Fill

**Addendum 1**

31 63 29 - Drilled Concrete Piers and Shafts

**DIVISION 31 -- EXTERIOR IMPROVEMENTS**

**32 13 13 - Site Concrete (New Section)**

**Addendum 1**

**32 18 16.13 - Playground Protective Surfacing (New Section)**

**Addendum 1**

**DIVISION 31 -- UTILITIES**

**33 42 11 - Stormwater Gravity Piping (New Section)**

**Addendum 1**

**33 42 30 - Stormwater Drains (New Section)**

**Addendum 1**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Table of Contents 00 01 10 - 2
--	-------------------	-----------------------------------

**SECTION 00 31 00**  
**AVAILABLE PROJECT INFORMATION**

**PART 1 GENERAL**

**1.01 EXISTING CONDITIONS**

- A. Certain information relating to existing surface and subsurface conditions and structures is available to bidders but will not be part of Contract Documents, as follows:
- B. Geotechnical Report: Entitled Geotechnical Investigation Child Development Center Shade Structure Project, Grossmont High School, 1100 Murray Drive, El Cajon, California, dated June 28, 2023, Project Number 12429.034, Leighton Consulting, Inc.
  - 1. Original copy is available for inspection at District's offices during normal business hours.
  - 2. This report identifies properties of below grade conditions and offers recommendations for the design of foundations, prepared primarily for the use of Architect.
    - a. Soil and subsurface investigations conducted at site by an independent testing laboratory and report with log of borings prepared.
  - 3. Interpretation:
    - a. The District, Architect and Engineers disclaim all responsibility for the accuracy of information prepared by others.
      - 1) The District, Architect and Engineers disclaim all responsibility for the information to be completely representative of conditions and materials which may be encountered and as being adequate for the purposes of construction.
      - 2) Variations in kind, depth, quantity, and condition of soils may occur.
      - 3) The District, Architect and Engineers further disclaim responsibility for interpretation by Bidding Contractors and others of soil and subsurface investigation information, such as in projecting soil-bearing values, rock profiles, presence and scope of boulders and cobbles, soil stability and the presence, level and extent of underground water.
  - 4. The recommendations described shall not be construed as a requirement of this Contract, unless specifically referenced in Contract Documents.
  - 5. This report, by its nature, cannot reveal all conditions that exist on the site. Should subsurface conditions be found to vary substantially from this report, changes in the design and construction of foundations will be made, with resulting credits or expenditures to the Contract Sum accruing to District.
    - a. If variances from Geotechnical Report are found, make written report to Construction Manager.
    - b. Claims for conditions found to be not as indicated in soil investigation data not permitted, unless otherwise indicated in District-Contractor Agreement.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Available Project Information 00 31 00 - 1
--	------------	---

- 1) This applies only to conditions found after execution of the Agreement to be materially different from those reported and which are not customarily encountered in the geographic area.

#### **1.02 BIDDER'S INVESTIGATIONS**

- A. Bidder's Investigation: Bidder shall visit site and become familiar with site conditions.
  1. Bidder may, at Bidder's own expense and prior to bidding, make soil surveys and investigations Bidder considers necessary.
  2. Bidder assumes risk that soil and underground conditions may be other than that indicated in soil investigation data.
- B. Procedures:
  1. Obtain authorization from Construction Manager prior to start of borings or subsurface investigations.
  2. Immediately upon completion of Bidder's subsurface investigation, return site areas affected by investigations to condition existing prior to start of Bidder subsurface investigations as directed by Construction Manager.

#### **PART 2 PRODUCTS (NOT USED)**

#### **PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Available Project Information 00 31 00 - 2
--	------------	---



## SECTION 02 41 00 DEMOLITION

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Selective demolition of built site elements.
  - 1. Demolition and removal of existing site improvements within Project area, as indicated on Drawings and as necessary to accomplish the Work, including:
    - a. ~~Asphaltic concrete and portland~~ **Portland** cement concrete paving.
    - b. ~~Abandoned underground utility lines outside of utility easement.~~
    - ~~c.~~ **b.** Pavement cutting and removal.
    - ~~d.~~ **c.** Debris removal.
  - 2. Handling and disposal of removed materials.
  - 3. Dewatering of excavations as necessary to control surface and sub-surface water.

#### 1.02 RELATED REQUIREMENTS

- A. Section 00 31 00 - Available Project Information: Existing building survey conducted by District; information about known hazardous materials.**
- ~~A.~~ **B.** Section 01 10 00 - Summary: Limitations on Contractor's use of site and premises.
- ~~B.~~ **C.** Section 01 10 00 - Summary: Description of items to be removed by District.
- D. Section 01 10 00 - Summary: Description of items to be salvaged or removed for re-use by Contractor.**
- ~~C.~~ **E.** Section 01 50 00 - Temporary Facilities and Controls: Site fences, security, protective barriers, and waste removal.
- ~~D.~~ **F.** Section 01 60 00 - Product Requirements: Handling and storage of items removed for salvage and relocation.
- ~~E.~~ **G.** Section 01 70 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring.
- ~~F.~~ **H.** Section 01 74 19 - Construction Waste Management and Disposal: Limitations on disposal of removed materials; requirements for recycling.
- ~~G.~~ **I.** Section 31 23 23 - Fill: Filling holes, pits, and excavations generated as a result of removal operations.

#### 1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 - Safety and Health Regulations for Construction.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 1
--	-------------------	----------------------------

#### 1.04 DEFINITIONS

- A. Remove: Remove and legally dispose of items, except those identified for use in recycling, re-use, and salvage programs.
- B. Environmental Pollution and Damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human or animal life; affect other species of importance to humanity; or degrade the utility of the environment for aesthetic, cultural or historical purposes.
- C. Inert Fill: A permitted facility that accepts inert waste such as asphalt and concrete exclusively for the purpose of disposal.
  - 1. Inert Solids/Inert Waste: Non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous substances or soluble pollutants at concentrations in excess of water-quality standards established by a regional water board and does not contain significant quantities of decomposable solid waste.
- D. Class III Landfill: A landfill that accepts non-hazardous materials such as household, commercial, and industrial waste, resulting from construction, remodeling, repair, and demolition operations. A Class III landfill must have a solid waste facilities permit from the State of California.
- E. Demolition Waste: Building materials and solid waste resulting from construction, remodeling, repair, cleanup, or demolition operations that are not hazardous. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe, and steel. The materials may include rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.
- F. Chemical Waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals and inorganic wastes.
- G. Recycling: The process of sorting, cleansing, treating and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.
- H. Reuse: The use, in the same or similar form as it was produced, of a material which might otherwise be discarded.
- I. Solid Waste: All putrescible and nonputrescible solid, semisolid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge which is not hazardous waste, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes. "Solid waste" does not include hazardous waste, radioactive waste, or medical waste as defined or regulated by State law.

#### 1.05 ADMINISTRATIVE REQUIREMENTS

- A. Pre-Construction Conference: Conduct a pre-construction conference one week prior to the start of the work of this section; require attendance by all affected trades.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 2
--	-------------------	----------------------------

- B. Convene a conference at the Project site 3 days prior to starting demolition to review the Drawings and Specifications, requirements of authorities having jurisdiction, instructions and requirements of serving utilities, sequencing and interface considerations and project conditions.
- C. Conference shall be attended by Construction Manager, supervisory and quality control personnel of Contractor and all subcontractors performing this and directly-related Work.
- D. Submit minutes of meeting to District, Project Inspector and Architect, for Project record purposes.
- E. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.
  - 1. Refer to sequence requirements specified in Section 01 10 00 - Summary; and construction progress schedule requirements ~~specified in Section 01 32 16 - Construction Progress Schedule.~~

#### 1.06 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain property of Grossmont Union High School District, demolished materials shall become the Contractor's property and shall be removed, recycled, or disposed from Project site in an appropriate and legal manner.
  - 1. Arrange a meeting no less than ten (10) days prior to demolition with the District or Construction Manager and other designated representatives to review any salvagable items to determine if District wants to retain ownership, and discuss Contractor's Waste Management and Recycling Plan.

#### 1.07 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Demolition phase:
  - 1. Proposed dust-control measures.
  - 2. Proposed noise-control measures.
  - 3. Schedule of demolition activities indicating the following:
    - a. Detailed sequence of demolition and removal work, including start and end dates for each activity.
    - b. Dates for shutoff, capping, and continuation of utility services.
  - 4. Contractor's Waste Management and Recycling Plan: See Section 01 74 19 - Construction Waste Management and Disposal.
    - a. This plan will not otherwise relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
  - 5. Contractor's Reuse, Recycling, and Disposal Report: See Section 01 74 19 - Construction Waste Management and Disposal.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 3
--	-------------------	----------------------------

1. Record drawings: Identify and accurately locate capped utilities and other subsurface structural, electrical, or mechanical conditions.

#### **1.08 SUBMITTALS**

- A. Demolition and Removal Procedures and Schedule: Submit for Project record only.
- B. Project Record Drawings: Submit in accordance with provisions specified in Section 01 78 00 - Closeout Submittals. Indicate verified locations of underground utilities and storm drainage system on project record drawings.

#### **1.09 QUALITY ASSURANCE**

- A. Demolition Firm Qualifications: Company specializing in the type of work required.
  1. Minimum of 5 years of documented experience.

#### **1.10 SCHEDULING**

- A. Schedule Work to precede new construction.
- B. Describe demolition removal procedures and schedule.
- C. Perform work between the hours of 8am and 5pm, subject to noise abatement regulations and District's approval for noise considerations.

### **PART 2 PRODUCTS -- NOT USED**

### **PART 3 EXECUTION**

#### **3.01 SCOPE**

- A. Remove and store the entire building designated storage shed.
- B. Remove paving and curbs as required to accomplish new work.
- C. Remove concrete slabs on grade as indicated on drawings.
- D. Remove chain link fence and reinstall after paving.
- E. Remove other items indicated, for relocation.
  1. Storage shed

#### **~~3.01~~3.02 GENERAL PROCEDURES AND PROJECT CONDITIONS**

- A. Conform to the relevant Article of the General Conditions, South Coast Air Quality Management District and other applicable regulatory procedures when discovering hazardous or contaminated materials.
- B. Selective Demolition of Site and Building Elements:
  1. Use techniques acceptable to authorities having jurisdiction and which will achieve intended results and provide protection of surrounding features to remain.
  2. Some items may have been demolished prior to Work of this Contract. Verify existing conditions prior to start of demolition. If items are or have been demolished contact the Architect.

Grossmont Union High School District Childcare Center Shade Structure RCA Project No. 1-30-65	Addendum 1	Demolition 02 41 00 - 4
---	------------	----------------------------

3. **Some items may require postponement of demolition until late in Contract Time period.**
4. **Phase demolition as necessary to provide adequate interfacing of related Work.**
5. **Demolish in an orderly and careful manner. Protect existing foundations, retaining walls, utility structures, other structures and finish materials to remain.**

**~~B~~-C. Field Measurements and Conditions:**

1. Survey existing conditions and correlate with requirements indicated to determine extent of demolition and recycling required.
2. In addition to provisions of the Conditions of the Contract, verify dimensions and field conditions prior to construction. Verify condition of substrate and adjoining Work before proceeding with demolition Work. If conflict is found notify Construction Manager, Project Inspector and Architect.

**~~C~~-D. Comply with other requirements specified in Section 01 70 00.**

**~~D~~-E. Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Obtain and pay for all permits required.**

**~~E~~-F. Environmental Controls**

1. Comply with federal, state and local regulations pertaining to water, air, solid waste, recycling, chemical waste, sanitary waste, sediment and noise pollution.
2. Confine demolition activities to areas defined by public roads, easements, and work area limits indicated on the drawings.
3. Temporary Construction: Remove indications of temporary construction facilities, such as haul roads, work areas, structures, stockpiles or waste areas.
4. Water Resources: Comply with applicable regulations concerning the direct or indirect discharge of pollutants to underground and natural surface waters.
  - a. Oily Substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water in such quantities as to affect normal use, aesthetics, or produce a measurable ecological impact on the area.
    - 1) Store and service construction equipment at areas designated for collection of oil wastes.
5. Dust Control, Air Pollution, and Odor Control: Prevent creation of dust, air pollution and odors.
  - a. Use temporary enclosures and other appropriate methods to limit dust and dirt rising and scattering in air to lowest practical level.
  - b. Store volatile liquids, including fuels and solvents, in closed containers.
  - c. Properly maintain equipment to reduce gaseous pollutant emissions.
6. Noise Control: Perform demolition operations to minimize noise.
  - a. Provide equipment, sound-deadening devices, and take noise abatement measures that are necessary to comply with the requirements of this Contract.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 5
--	-------------------	----------------------------

- F.G.** Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.
1. Obtain required permits.
  2. Comply with applicable requirements of NFPA 241.
  3. Use of explosives is not permitted.
  4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
    - a. Survey condition of the building to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
      - 1) Retain a licensed and qualified civil or structural engineer to provide analysis, including calculations, necessary to ensure the safe execution of the demolition work.
    - b. Prevent movement or settlement of adjacent structures. Provide bracing and shoring.
    - c. Perform surveys as the Work progresses to detect hazards resulting from demolition activities.
  5. Provide, erect, and maintain temporary barriers and security devices.
    - a. Provide, erect, and maintain temporary barriers, safety and security devices , for protection of streets, sidewalks, curbs, adjacent property and the public.
    - b. Protection: Protect existing construction and adjacent areas with temporary barriers and security devices in accordance with requirements specified in Section 01 50 00 - Temporary Facilities and Controls.
      - 1) Review location and type of construction of temporary barriers with District and/or the Construction Manager.
      - 2) Barriers shall control dust, debris and provide protection for persons occupying and using adjacent facilities.
      - 3) Maintain protected egress and access at all times, in accordance with requirements of authorities having jurisdiction and with permission of Construction Manager (AHJ having jurisdiction).
  6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
  7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.
  8. Do not close or obstruct roadways or sidewalks without permit.
  9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 6
--	-------------------	----------------------------

10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

~~G.H.~~ Do not begin removal until receipt of notification to proceed from District.

~~H.I.~~ Do not begin removal until built elements to be salvaged or relocated have been removed.

~~I.J.~~ Protect existing structures and other elements that are not to be removed.

1. Provide bracing and shoring.
2. Prevent movement or settlement of adjacent structures.
3. Stop work immediately if adjacent structures appear to be in danger.
4. Protect existing landscaping materials, appurtenances, structures and items that are not to be demolished, or are on adjacent property.
5. Mark location of utilities.

~~J.K.~~ Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

~~K.L.~~ Hazardous Materials: Comply with 29 CFR 1926 and state and local regulations.

~~L.M.~~ Remove materials to be re-installed or retained in manner to prevent damage. Store and protect in accordance with requirements of Section 01 60 00 - Product Requirements.

~~M.N.~~ Perform demolition in a manner that maximizes salvage and recycling of materials.

1. Comply with requirements of Section 01 74 19 - Construction Waste Management and Disposal.
2. Dismantle existing construction and separate materials.
3. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

~~N.O.~~ Damages: Promptly repair damages to adjacent facilities caused by demolition operations.

**P. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.**

### **3.023.03 EXISTING UTILITIES**

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to District.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to District.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 7
--	-------------------	----------------------------

~~H. Utility Lines, Posts and Structures:~~

- ~~1. Work by Utility: Posts, conductors, guy wires, boxes, structures and equipment shown to be cleared or removed by the responsible utility company or agency shall be considered work under a separate contract.~~
- ~~2. Coordination: The Contractor shall arrange, schedule and coordinate work by utility companies and agencies.~~
- ~~3. Payment: Costs, if any, imposed by utility companies and agencies shall be included in the Contract Sum.~~

**3.04 PORTLAND CEMENT CONCRETE PAVING DEMOLITION**

- A. Cutting: Make a saw cut at edges of existing paving to be removed, where portions of existing paving are indicated to remain.**
- B. Cutting Method: When adjacent to new paving, cut with abrasive type, water-cooled saw to a minimum depth of 1-1/2 inches. Cut lines straight and square to face of paving.**
- C. Aggregate Base: Existing aggregate base may be retained except where landscaping and overexcavation are indicated.**
- D. Concrete Removal: Break concrete and remove debris. Preserve straight cut.**
- E. Disposal: Remove debris from the site except where allowed or directed for fill for subsequent earthwork or for landscape walls.**

**~~3.03~~3.05 DEBRIS AND WASTE REMOVAL**

- A. Remove debris, junk, and trash from site.**
- B. Remove from site all materials not to be reused on site; comply with requirements of Section 01 74 19 - Waste Management.**
- C. Remove temporary work.**
- D. Leave site in clean condition, ready for subsequent work.**
- E. Clean up spillage and wind-blown debris from public and private lands.**

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Demolition 02 41 00 - 8
--	-------------------	----------------------------



## **SECTION 31 22 00 GRADING**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Coordinate work of this Section to compliment and coordinate with field conditions and Civil Drawing noted specific referenced requirements. Utilize the most stringent requirements.
- B. Removal of topsoil.
- C. Rough grading and consolidation/compaction the site for site structures.
  - 1. Preparation for excavation, trenching, backfilling and compacting Work.
- D. Excavation of subsoil, stockpiling for later reuse, and removal of excess from the site.
- E. Preparing of subgrade for walks, pavements and site retaining walls.
- F. Excavating, backfilling and compaction for wet utility lines.
- G. Finish grading for planting.

#### **1.02 RELATED REQUIREMENTS**

- A. Document 00 31 00 - Available Project Information: Geotechnical report; bore hole locations and findings of subsurface materials.
- B. Section 01 40 00 - Quality Requirements.
- C. Section 01 45 33 - Code-Required Special Inspections.
- D. Section 01 70 00 - Execution and Closeout Requirements.
- E. Section 31 23 16 - Excavation.
- F. Section 31 23 23 - Fill: Filling and compaction.
- G. Section 32 13 13 - Site Concrete.

#### **1.03 SUBMITTALS**

- A. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.
  - 1. Accurately record location of all changes in finish elevations and gradients which materially affect drainage.

#### **1.04 QUALITY ASSURANCE**

- A. Regulatory Requirements: For conditions not covered in this Section, refer to applicable provisions of the California Building Code (CBC), Chapter 18A - Soils and Foundations, as amended and adopted by authorities having jurisdiction.
- B. Perform Work in accordance with locally adopted {\rs\#1} standards.
  - 1. Maintain one copy on site.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Grading 31 22 00 - 1
--	------------	-------------------------

## 1.05 PROTECTION

- A. Dust Control: Comply with requirements specified in Section 01 50 00 - Temporary Facilities and Controls.
- B. Protection:
  - 1. Comply with general requirements specified in Section 01 50 00 - Temporary Facilities and Controls.
  - 2. Provide protection for walks, curbs, drains, and trees and boxing around corners of existing buildings to prevent damage.
  - 3. Keep adjacent roads, streets and drives clear of dirt and debris from earthwork operations.
- C. Underground Utilities:
  - 1. Buried utility lines may exist.
  - 2. If such are encountered, notify Construction Manager, Architect and District and for directions to be followed for preservation, relocation or demolition of utilities.

## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Topsoil: Topsoil excavated on-site.
  - 1. Graded.
  - 2. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.
- B. Verify the absence of standing or ponding water.
- C. The Drawings do not purport to show all below-grade conditions and objects on the site. Refer to Section 00 31 00 - Available Project Information.
- D. Upon discovery of unknown utility or concealed conditions, discontinue affected Work and notify DSA, Architect and District for direction. Unforeseen conditions shall be resolved in accordance with the General Conditions.

### 3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities.
- C. Locate, identify, and protect from damage above- and below-grade utilities to remain.
  - 1. Maintain and protect existing utilities remaining which pass through Project area.
- D. Notify utility company to remove and relocate utilities, as required.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Grading 31 22 00 - 2
--	------------	-------------------------

- E. Provide temporary means and methods to remove all standing or ponding water from areas prior to grading.
- F. Protect site features to remain, including but not limited to bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs, from damage by grading equipment and vehicular traffic.
- G. Protect trees to remain by providing substantial fencing around entire tree at the outer tips of its branches; no grading is to be performed inside this line.
- H. Protect plants, lawns, and other features to remain as a portion of final landscaping.

### 3.03 ROUGH GRADING

- A. Comply with Geotechnical Report and field directives of geotechnical engineer on-site.
- B. Eliminate uneven areas and low spots. Remove debris, roots, branches, stones, in excess of 1 inch in size.
- C. Remove topsoil from areas to be further excavated, re-landscaped, or re-graded, without mixing with foreign materials.
- D. Do not remove topsoil when wet.
- E. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.
- F. Do not remove wet subsoil , unless it is subsequently processed to obtain optimum moisture content.
- G. When excavating through roots, perform work by hand and cut roots with sharp axe.
- H. See Section 31 23 23 for filling procedures.
- I. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.
- J. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack surface water control.
- K. Grade top perimeter of excavations to prevent surface water from draining into excavation.
  - 1. Provide dewatering of excavations as required to ensure suitable conditions for concrete and backfilling operations.
- L. Uniformly grade areas as shown on Drawings to tolerances specified in this Section..
  - 1. Evenly grade between points where elevations are shown or between points of Work and existing grades.
- M. Slope rough grade away from building perimeter at gradient indicated.
  - 1. Upaved area slope for a distance of 10 feet from the building: Not less than one unit vertical in 20 units horizontal or 5 percent.
    - a. CBC Section 1804A.4.
  - 2. When supported by soil conditions and climate; slope not less than 1:48 or 2 percent in unpaved areas.
    - a. CBC Section 1804A.4, Exception.
- N. Make grade changes gradual. Blend slopes into level areas.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Grading 31 22 00 - 3
--	------------	-------------------------

### 3.04 SOIL REMOVAL AND STOCKPILING

- A. Stockpile topsoil to be re-used on site; remove remainder from site.
  - 1. Topsoil and vegetation layers, root zones, and similar surface materials should be stripped and stockpiled for either reuse in landscape surface areas or removed from the site.
- B. Stockpile subsoil on site for backfill, if soil is appropriate.
  - 1. Stockpile subsoil to depth not exceeding 8 feet.
- C. Remove all lumped subsoil, boulders and rock in excess of 3 inches in greatest dimension.
- D. Stockpile subsoil to be re-used on site; remove remainder from site.
- E. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; cover to protect from erosion.

### 3.05 FINISH GRADING

- A. Before Finish Grading:
  - 1. Verify building and trench backfilling have been inspected.
  - 2. Verify subgrade has been contoured and compacted.
- B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove soil contaminated with petroleum products.
  - 1. Comply with CBC Section 1804A.3.
- C. Where topsoil is to be placed, scarify surface to depth of 8 inches.
- D. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 8 inches.
- E. Place topsoil in areas indicated.
- F. Place topsoil where required to level finish grade.
- G. Place topsoil during dry weather.
- H. Remove roots, weeds, rocks, and foreign material while spreading.
- I. Near plants spread topsoil manually to prevent damage.
- J. Fine grade topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of subgrade.
- K. Lightly compact placed topsoil.
- L. Maintain stability of topsoil during inclement weather. Replace topsoil in areas where surface water has eroded thickness below specifications.

### 3.06 TOLERANCES

- A. Top Surface of Subgrade: Plus or minus 0.10 foot (1-3/16 inches) from required elevation.
- B. Top Surface of Finish Grade: Plus or minus 0.04 foot (1/2 inch).
- C. Top Surface Under Paving: Plus or minus 0.04 foot (1/2 inch) from required elevation.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Grading 31 22 00 - 4
--	------------	-------------------------

### **3.07 REPAIR AND RESTORATION**

- A. Existing Facilities, Utilities, and Site Features to Remain: If damaged due to this work, repair or replace to original condition.
- B. Trees to Remain: If damaged due to this work, trim broken branches and repair bark wounds; if root damage has occurred, obtain instructions from Architect as to remedy.
- C. Other Existing Vegetation to Remain: If damaged due to this work, replace with vegetation of equivalent species and size.

### **3.08 FIELD QUALITY CONTROL**

- A. See Section 31 23 23 for compaction density testing.
- B. Field Quality Control:
  - 1. Field inspections and testing shall be performed in accordance with requirements specified in Section 01 40 00 and 01 45 33.
  - 2. Make required quality control submittals in accordance with requirements specified.
- C. Non-compliance: Should grade elevations, tests of fill or backfill indicate non-compliance with required elevations or density, Contractor shall over-excavate, recompact and retest until specified grade or density is obtained.
  - 1. Costs and Time associated with remedial Work and retesting shall be in accordance with provisions of the General Conditions.
  - 2. Retesting to demonstrate compliance shall be by a testing laboratory acceptable to District and shall be at Contractor's expense.

### **3.09 CLEANING**

- A. Remove unused stockpiled topsoil and subsoil. Grade stockpile area to prevent standing water.
- B. Leave site clean and raked, ready to receive landscaping.

### **3.10 PROTECTION**

- A. Protect completed grading from erosion from weather and traffic.
- B. Over-excavate and recompact areas damaged by construction activities and weather.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Grading 31 22 00 - 5
--	------------	-------------------------

## SECTION 31 23 16 EXCAVATION

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Excavating for footings and site structures.
- B. Trenching for utilities outside the building to on-site existing utilities.**
- ~~B.C.~~ Temporary excavation support and protection systems.

#### 1.02 RELATED REQUIREMENTS

- A. Document 00 31 00 - Available Project Information: Geotechnical report; bore hole locations and findings of subsurface materials.**
- ~~A.B.~~ Section 01 40 00 - Quality Requirements: Inspection of bearing surfaces.
- ~~B.C.~~ Section 01 50 00 - Temporary Facilities and Controls: Dewatering excavations and water control.
- ~~C.D.~~ Section 01 70 00 - Execution and Closeout Requirements: Project conditions; protection of bench marks, survey control points, and existing construction to remain; reinstallation of removed products; temporary bracing and shoring. General requirements for dewatering of excavations and water control.
- E. Section 31 22 00 - Grading: Grading.**
- ~~D.F.~~ Section 31 23 23 - Fill: Fill materials, backfilling, and compacting.

#### 1.03 REFERENCE STANDARDS

- A. 29 CFR 1926 - Safety and Health Regulations for Construction.

#### ~~1.04 REFERENCE STANDARDS~~

#### ~~1.05~~1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Temporary Support and Excavation Protection Plan.
- C. Project Record Documents: Record drawings at project closeout according to 01 70 00 - Execution and Closeout Requirements. Show locations of installed support materials left in place, including referenced locations and depths, on drawings.
- D. Field Quality Control Submittals: Document visual inspection of load-bearing excavated surfaces.

#### ~~1.06~~1.05 QUALITY ASSURANCE

- A. Temporary Support and Excavation Protection Plan:
  - 1. Indicate sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Excavation 31 23 16 - 1
--	-------------------	----------------------------

2. Include drawings and calculations for bracing and shoring.
  3. Bracing and shoring design to meet requirements of OSHA's Excavation Standard, 29 CFR 1926, Subpart P.
- B. Designer Qualifications: For design of temporary shoring and bracing, employ a Professional Engineer experienced in design of this type of work and licensed in California.
- C. Shoring Installer Qualifications: Company specializing in performing the shoring and bracing work of this section with minimum five years of documented experience.

#### **1.071.06 COORDINATION OF SPECIFICATION REQUIREMENTS**

- A. Coordinate these Specification Section requirements with specifications included on Drawings. Comply with more stringent requirements and with those requirements of authorities having jurisdiction.
- B. Comply in full with the direction (recommendations) given in the Geotechnical Report.**

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

- A. Bedding and Fill to Correct Over-Excavation:
1. See Section 31 23 23 for bedding and corrective fill materials at general excavations.

### **PART 3 EXECUTION**

#### **3.01 DIG ALERT NOTIFICATION**

- A. Before any excavation in or near the public right-of-way, contact the Underground Service Alert of Southern California (Dig Alert) at 811 for information on buried utilities and pipelines.
- B. Delineation of the proposed excavation site is mandatory. Mark the area to be excavated with water soluble or chalk based white paint on paved surfaces or with other suitable markings such as flags or stakes on unpaved areas.
- C. Call at least Two (2) full working days prior to digging.
- D. If the members (utility companies) have facilities within the work area, they will mark them prior to the start of your excavation and if not, they will let you know there is no conflict. A different color is used for each utility type (electricity is marked in red, gas in yellow, water in blue, sewer in green, telephone and cable TV in orange).
- E. The Law requires to hand expose to the point of no conflict 24 inches on either side of the underground facility, to know its exact location before using power equipment.
- F. If caught digging without a Dig Alert ticket fines can be as much as \$50,000 per California government code 4216.

#### **3.02 EXAMINATION**

- A. Verify that survey bench mark and intended elevations for the work are as indicated.
- B. Survey existing adjacent structures and improvements and establish exact elevations at fixed points to act as benchmarks.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Excavation 31 23 16 - 2
--	-------------------	----------------------------

1. Resurvey benchmarks during installation of excavation support and protection systems and notify District if any changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.
- C. Determine the prevailing groundwater level prior to excavation. If the proposed excavation extends less than 1 foot into the prevailing groundwater, control groundwater intrusion with perimeter drains routed to sump pumps, or as directed by Architect. If the proposed excavation extends more than 1 foot into the prevailing groundwater, control groundwater intrusion with a comprehensive dewatering procedures, or as directed by Geotechnical Engineer.

### **3.03 PREPARATION**

- A. Identify required lines, levels, contours, and datum locations.
- B. Locate, identify, and protect utilities that remain and protect from damage.
- C. Protect bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- D. Grade top perimeter of excavation to prevent surface water from draining into excavation. Provide temporary means and methods, as required, to maintain surface water diversion until no longer needed, or as directed by Architect.
- E. See Sections 01 70 00 and 02 41 00 for underpinning and shoring of adjacent structures that could be damaged by excavating work.

### **3.04 TEMPORARY EXCAVATION SUPPORT AND PROTECTION**

- A. Excavation Safety: Comply with OSHA's Excavation Standard, 29 CFR 1926, Subpart P.
  1. Excavations in stable rock or in less than 5 feet in depth in ground judged as having no cave-in potential do not require excavation support and protection systems.
  2. Depending upon excavation depth, time that excavation is open, soil classification, configuration and slope of excavation sidewalls, design and provide an excavation support and protection system that meets the requirements of 29 CFR 1926, Subpart P:
    - a. Sloping and benching systems.
    - b. Support systems, shield systems, and other protective systems.
- B. Shoring Design: Comply with State of California Trenching and Shoring Manual issued by Offices of Structure Construction; 2011.
  1. Provide all materials and services necessary to properly engineer and construct shoring for excavations. Selection of materials and design of shoring, underpinning and bracing of new and existing structures shall be solely the responsibility of the Contractor.
- C. Underpin adjacent structures that could be damaged by excavating work, including utilities and pipe chases.
- D. Protect excavations from cave-in and from loose soil and other matter from falling in.
- E. Leave excavation support and protection systems, used as formwork or within 10 feet of existing foundations, permanently in place, unless otherwise noted.
  1. Cut off top 4 feet below grade, abandon remainder.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Excavation 31 23 16 - 3
--	-------------------	----------------------------



- F. Excavation support and protection systems not required to remain in place may be removed subject to approval of District or District's Representative.
  - 1. Remove temporary shoring and bracing in a manner to avoid harmful disturbance to underlying soils and damage to buildings, structures, pavements, facilities and utilities.

### 3.05 EXCAVATING

- A. Excavate to accommodate new structures and paving/site structures.
  - 1. Excavate to the specified elevations.
  - 2. Excavate to the length and width required to safely install, adjust, and remove any forms, bracing, or supports necessary for the installation of the work.
  - 3. Cut utility trenches wide enough to allow inspection of installed utilities.
  - 4. Hand trim excavations. Remove loose matter.
  - 5. Excavate subsoil from areas to be filled with structural fill, to construct foundations, footings, slabs on grade, paving and to achieve final finish grades.
  - 6. Over-excavate to working elevations for backfilling and compaction operations.
- B. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- C. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored, per CalOSHA requirements for Type C Soil.
  - 1. Machine slope banks of excavations to minimum 1 to 1 ratio horizontal to vertical or angle of repose, if less, until shored.
    - a. Exception: If authorized in writing by Geotechnical Engineer.
    - b. Slope must comply with local codes, ordinances and requirements of agencies having jurisdiction.
- D. Do not interfere with 45 degree influence line of bearing splay of foundations.
  - 1. Avoid interference at footings by providing additional width, depth, and other provisions.
- E. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- F. Provide temporary means and methods, as required, to remove all water from excavations until directed by Architect. Remove and replace soils deemed suitable by classification and which are excessively moist due to lack of dewatering or surface water control.

### 3.06 SUBGRADE PREPARATION

- A. See Section 31 23 23 for subgrade preparation at general excavations.

### 3.07 FILLING AND BACKFILLING

- A. Do not fill or backfill until all debris, water, unsatisfactory soil materials, obstructions, and deleterious materials have been removed from excavation.
- B. See Section 31 23 23 for fill, backfill, and compaction requirements at general excavations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Excavation 31 23 16 - 4
--	-------------------	----------------------------

### 3.08 REPAIR

- A. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 31 23 23 at no additional cost.

### 3.09 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.
- B. Provide for visual inspection of load-bearing excavated surfaces by Architect and geotechnical consultant before placement of foundations.
- C. **Scarification, over excavation and all other excavations will be subject to the approval of the Geotechnical Engineer.**

### 3.10 CLEANING

- A. **Stockpile excavated material to be re-used in area designated on site in accordance with Section 31 22 00.**
- ~~A.~~B. Remove excavated material that is unsuitable for re-use from site.
- ~~B.~~C. Remove excess excavated material from site.
  - 1. **Geotechnical engineer or other consultant as selected by District to test soils prior to export for disposition.**

### 3.11 PROTECTION

- A. Divert surface flow from rains or water discharges from the excavation.
- B. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- C. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain foundation subgrade in satisfactory, undisturbed condition.
- D. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- E. Keep excavations free of standing water and completely free of water during concrete placement.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Excavation 31 23 16 - 5
--	-------------------	----------------------------

## SECTION 31 23 23 FILL

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Filling, backfilling, and compacting for footings, **paving, and site structures.**
- B. Filling holes, pits, and excavations generated as a result of removal (demolition) operations.

#### 1.02 RELATED REQUIREMENTS

- A. **Document 00 31 00 - Available Project Information: Geotechnical report; bore hole locations and findings of subsurface materials.**
- ~~A.~~B. Section 03 30 00 - Cast-in-Place Concrete.
- ~~B.~~C. Section 31 23 16 - Excavation: Removal and handling of soil to be re-used.

#### 1.03 DEFINITIONS

- A. Finish Grade Elevations: Indicated on drawings.
- B. Subgrade Elevations: Indicated on drawings.

#### 1.04 REFERENCE STANDARDS

- A. ASTM D4829 - Standard Test Method for Expansion Index of Soils.
- B. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
- C. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- D. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- E. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
- F. DTSC-Clean Fill - California Department of Toxic Substances Control - Clean Imported Fill Material.
- G. **Geotechnical Report.**

#### 1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Soil Samples: 10 pounds sample of each type of fill; submit in air-tight containers to testing laboratory.
  - 1. Submit samples directly to Geotechnical Engineer for testing and analysis copy transmittals to Architect and District.
- C. Materials Sources: Submit name of imported materials source.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 1
--	-------------------	----------------------

- D. Fill Composition Test Reports: Results of laboratory tests on proposed and actual materials used, including manufactured fill.
- E. Compaction Density Test Reports.
- F. Manufacturer's Instructions.
- G. Manufacturer's Qualification Statement.
- H. Specimen Warranty.
- I. Provide proof that all imported materials conform to the requirements of DTSC-Clean Fill Imported Fill Materials for School Sites by proper documentation for the imported materials.

#### 1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than ten years of documented experience.
- B. Testing Agency Qualifications: Independent firm specializing in performing testing and inspections of the type specified in this section.
- C. Copies of Documents at Project Site: Maintain at the project site a copy of each referenced document that prescribes execution requirements.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles where agreed to.
  - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
  - 2. Prevent contamination.
  - 3. Protect stockpiles from erosion and deterioration of materials.

#### 1.08 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a five year period after Date of Substantial Completion.

### PART 2 PRODUCTS

#### 2.01 FILL MATERIALS

- A. All fill materials will be in conformance with the Soils Report, addenda and geotechnical data indicated in Section 00 31 00 - Available Project Information.**

~~A.~~**B.** General Fill: Subsoil excavated on-site.

- 1. Graded.
- 2. Free of lumps larger than 3 inches, rocks larger than 3 inches, and debris.
- 3. Complying with ASTM D2487 Group Symbol CL.

~~B.~~**C.** Structural Fill: Subsoil excavated on-site.

- 1. Graded.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 2
--	-------------------	----------------------

2. Free of organic matter, debris, and oversize particles (e.g., cobbles, rubble, etc. that are larger than 3 inches, rocks larger than 3 inches. Fill shall contain at least fifty percent of material smaller than 1/4 inch in size.
3. Imported fill materials: The soil shall be tested for potential contamination in accordance with DTSC-Clean Fill protocols. Submit to Geotechnical Engineer.
  - a. Import sandy soil shall be free of organics, debris and oversize particles (e.g., cobbles, rubble, rocks, etc. that are greater than 3 inches in the largest dimension).
  - b. Additionally, import soils shall not have any corrosion impacts to buried concrete; and be non-expansive (Expansion Index less than 21 per ASTM D4829).
  - c. Prior to import, geotechnical consultant shall evaluate and test the import soils in order to confirm the quality of the material.
4. On-site soils should only be used as specified in the Soils Report.
5. Complying with ASTM D2487 Group Symbol CL.

~~C.D.~~ Concrete for Fill: See Section 03 30 00; compressive strength of 2,500 psi.

1. Exception: Concrete used under footings and foundations to correct over-excavation shall be same as for footings and foundation.

~~D.E.~~ Granular Fill- Fill Type GM, GW: Coarse aggregate, conforming to Uniform Standard Specifications for Public Works Construction Off-Site Improvements standard.

~~E.F.~~ Granular Fill - Pea Gravel: Natural stone; washed, free of clay, shale, organic matter.

1. Grade in accordance with ASTM D2487 Group Symbol GP.

~~F.~~ Topsoil: Topsoil excavated on-site.

~~1. Unclassified.~~

~~a. The soil shall be tested for potential contamination in accordance with DTSC Clean Fill protocols.~~

~~2. Graded.~~

~~3. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.~~

~~4. Acidity range (pH) of 5.5 to 7.5.~~

~~5. Containing a minimum of 4 percent and a maximum of 25 percent inorganic matter.~~

~~6. Complying with ASTM D2487 Group Symbol OH.~~

~~7. Limit decaying matter to 5 percent of total content by volume.~~

G. Type F - Subsoil: Reused, free of rocks larger than 3 inch size, and debris.

1. Existing fill and alluvium or older alluvium may be considered suitable for re-use as compacted fills provided the recommendations of the geotechnical report and observations of the geotechnical engineer are followed.

## 2.02 ACCESSORIES

- A. Geotextile Fabric: Non-biodegradable, non-woven; Geotex 801 manufactured by Propex Geotextile Systems, geotextile.com.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 3
--	-------------------	----------------------

## 2.03 SOURCE QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for testing and analysis of soil material.
- B. Where fill materials are specified by reference to a specific standard, test and analyze samples for compliance before delivery to site.
- C. If tests indicate materials do not meet specified requirements, change material and retest.
- D. Provide materials of each type from same source throughout the Work.
- E. Comply with EPA/DTSC-Clean Fill requirements.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verify structural or other backfill materials to be reused or imported are acceptable to the satisfaction of the Geotechnical Engineer. Approval shall be obtained in advance of re-use or importation onto the site.
  - 1. Test soil for potential contamination in accordance with DTSC-Clean Fill protocols.
  - 2. Provide imported fill materials compatible with on-site soils in addition to being suitable for its intended use with the following criterion, as allowed by the Geotechnical Engineer.
    - a. Predominantly granular in nature.
    - b. Containing no rocks larger than 3 inches maximum dimension.
    - c. Free of organic material (loss on ignition less-than 2 percent).
    - d. Very low expansion potential (with an Expansion Index less than 21).
    - e. Low corrosion impact to the proposed improvements.
- B. Verify that survey bench marks and intended elevations for the Work are as indicated.
- C. Identify required lines, levels, contours, and datum locations.
- D. Verify subdrainage, dampproofing, or waterproofing installation has been inspected.
- E. Verify structural ability of unsupported walls to support imposed loads by the fill.
- F. Verify areas to be filled are not compromised with surface or ground water.

### 3.02 PREPARATION

- A. Scarify and proof roll subgrade surface to a depth of 8 inches to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with AWS D1.4/D1.4M Type II or concrete fill and compact to density equal to or greater than requirements for subsequent backfill material.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Prior to placement of aggregate base course material at paved areas, compact subsoil to 95 percent of its maximum dry density in accordance with ASTM D1557.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 4
--	-------------------	----------------------

- E. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

### 3.03 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Fill up to subgrade elevations unless otherwise indicated.
  - 1. Place fill soils compacted in horizontal lifts to a relative compaction of 90 percent or more in general accordance with ASTM D1557.
  - 2. Lift thickness for fill soils will vary depending on the type of compaction equipment used but should generally be placed in horizontal lifts not exceeding 8 inches in loose thickness.
  - 3. Place fill soils at slightly above optimum moisture content as evaluated by ASTM D1557.
  - 4. Avoid damage to wet and dry utility lines when compacting fill and subgrade materials.
- C. Employ a placement method that does not disturb or damage other work.
  - 1. Do not disturb or damage foundation perimeter drainage and foundation waterproofing and protective cover utilities in trenches.
- D. Systematically fill and compact per geotechnical report. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Granular Fill: Place and compact materials in equal continuous layers not exceeding 6 inches compacted depth.
- G. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth.
- H. Slope grade away from building minimum 2 inches in 10 feet, unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- I. Correct areas that are over-excavated.
  - 1. Load-bearing foundation surfaces: Fill with concrete.
  - 2. Other areas: Use general fill, flush to required elevation, compacted to minimum 90 or 95 percent of maximum dry density in subgrade zone.
- J. Compaction Density Unless Otherwise Specified or Indicated:
  - 1. Under paving and similar construction: 90 percent of maximum dry density.
  - 2. At upper 12 inches beneath vehicular pavements: 95 percent of maximum dry density.
  - 3. At other locations: At least 90 percent of maximum dry density.
- K. Reshape and re-compact fills subjected to vehicular traffic.
- L. Maintain temporary means and methods, as required, to remove all water while fill is being placed as required, or until directed by the Architect. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack of dewatering or surface water control.
- M. Remove surplus fill and backfill materials from site.

### 3.04 FILL AT SPECIFIC LOCATIONS

- A. Use general fill unless otherwise specified or indicated.
- B. ~~Structural Fill~~**At Footings:**
  - 1. Use general fill.
  - 2. Fill up to subgrade elevation.
  - 3. ~~Maximum depth per lift: 6 inches, compacted.~~
  - 4.3. Compact **each lift** to ~~minimum~~ at least 90 percent of maximum dry density.
  - 4. **Backfill simultaneously on each side of unsupported foundation walls until supports are in place.**

### 3.05 TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.
- B. Top Surface of Filling Under Paved Areas: Plus or minus 1/2 inch from required elevations.

### 3.06 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.
  - 1. Laboratory Tests and Analyses: Where backfill is required to be compacted to a specified density, tests for compliance shall be made in accordance with requirements specified in Section 01 40 00 - Quality Requirements.
- B. Perform compaction density testing on compacted fill in accordance with ASTM D1556 or ASTM D6938.
  - 1. Field inspections and testing shall be performed and submitted in accordance with requirements specified in Section 01 40 00 - Quality Requirements.
  - 2. Allow testing service to inspect and approve each subgrade and fill layer before further fill, backfill or construction Work is performed.
  - 3. Alternate Density Test Method:
    - a. Field density tests may also be performed by the nuclear method in accordance with ASTM D6938, providing that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D1556/D1556M.
    - b. In conjunction with each density calibration check, check the calibration curves furnished with the moisture gages in accordance with ASTM D6938.
    - c. If field tests are performed using nuclear methods, make calibration checks of both density and moisture gages at beginning of Work, on each different type of material encountered, and at intervals as directed by Architect or District's testing and inspection agency.
- C. Evaluate results in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D 1557 ("modified Proctor") or AASHTO T 180.
- D. Non-compliance: If tests indicate work does not meet specified requirements, remove work, replace and retest.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 6
--	-------------------	----------------------



1. Should tests of fill or backfill indicate non-compliance with required density, Contractor shall over-excavate, recompact and retest until specified density is obtained.
  2. Costs and Time associated with remedial Work and retesting shall be in accordance with provisions of the General Conditions.
  3. Retesting to demonstrate compliance shall be by a testing laboratory acceptable to District and shall be at Contractor's expense.
- E. Frequency of Tests:
1. Footing Subgrade Testing:
    - a. For each strata of soil on which footings will be placed, perform at least one in-place density test to verify required design bearing capacities.
    - b. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with related tested strata when acceptable to Geotechnical Engineer.
  2. Paved Areas Testing:
    - a. Perform at least one field density test of subgrade for every 2,000 sf of paved area or building slab, but in no case fewer than three tests.
    - b. In each compacted fill layer, perform one field density test for every 2,000 sf of overlaying building slab or paved area, but in no case fewer than three tests.
  - ~~3. Foundation Wall Backfill Testing: Perform at least two field density tests at locations and elevations as directed.~~
- F. Proof roll compacted fill at surfaces that will be under slabs-on-grade.

### 3.07 CLEANING

- A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	<b>Addendum 1</b>	Fill 31 23 23 - 7
--	-------------------	----------------------

## **SECTION 32 13 13 SITE CONCRETE**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Concrete sidewalks and general site applications.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 31 22 00 - Grading: Preparation of site for paving.
- C. Section 31 23 23 - Fill: Compacted subbase for paving.

#### **1.03 REFERENCE STANDARDS**

- A. ACI PRC-211.1 - Selecting Proportions for Normal-Density and High Density-Concrete - Guide.
- B. ACI PRC-304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete.
- C. ACI PRC-305 - Guide to Hot Weather Concreting.
- D. ACI PRC-306 - Guide to Cold Weather Concreting.
- E. ACI SPEC-301 - Specifications for Concrete Construction.
- F. ACI 318 - Building Code Requirements for Structural Concrete.
- G. ADA Standards - 2010 ADA Standards for Accessible Design.
- H. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
- I. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
- J. ASTM C33/C33M - Standard Specification for Concrete Aggregates.
- K. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- L. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
- M. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
- N. ASTM C150/C150M - Standard Specification for Portland Cement.
- O. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
- P. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete.
- Q. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer.
- R. ASTM C1193 - Standard Guide for Use of Joint Sealants.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 1
--	------------	-------------------------------

- S. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- T. ASTM D1752 - Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
- U. CBC - California Building Code.
- V. CBC Ch. 11B - California Building Code-Chapter 11B.
- W. CBC Chapter 11B - California Building Code-Chapter 11B.
- X. SSPWC (Greenbook) - Standard Specifications for Public Works Construction.

#### **1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on joint filler, admixtures, and curing compound.

#### **1.05 QUALITY ASSURANCE**

- A. Lines and Levels: Established by State of California licensed Surveyor or registered Civil Engineer. Costs of surveying services shall be included in the Contract Sum.
- B. Installer Qualifications: Company specializing in performing work of the type specified and with minimum three years of documented experience.

### **PART 2 PRODUCTS**

#### **2.01 PAVING ASSEMBLIES**

- A. Comply with applicable requirements of ACI SPEC-301.
- B. Concrete Sidewalks: 3,000 psi 28 day concrete, thickness as indicated, minimum 4 inches, natural grey color Portland cement.

#### **2.02 REGULATORY REQUIREMENTS**

- A. Conform to California Code of Regulations (CCR), Volume 2, Part 2, Chapters 18A and 19A.
- B. Conform to California Building Code (CBC), CBC Chapter 11B and ADA Standards for accessibility requirements.
  - 1. Portland cement concrete paving shall be stable, firm, and slip resistant and shall comply with CBC Ch. 11B-302 and 11B-403.
  - 2. Concrete paving and concrete finishes along accessible routes of travel shall be at least as slip-resistant as that described as a medium salted finish for slopes of less than 6%, and slip resistant at slopes of 6% or greater; CBC Ch. 11B-403.2.
  - 3. Accessible routes of travel, walks, paving, and sidewalks, shall have a continuous common surface with minimum width of 48 inches per CBC Ch. 11B-403.5.1, not interrupted by steps or by abrupt changes in level.
    - a. CBC Ch. 11B-303.2 Vertical: Changes in level exceeding 1/4 inch high maximum shall be permitted to be vertical and without edge treatment.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 2
--	------------	-------------------------------

- b. CBC Ch. 11B-303.3 Beveled: Changes in level between 1/4 inch high minimum and 1/2 inch high maximum shall be beveled with a slope not steeper than 1:2.
- 4. Surface cross slopes shall not exceed 2 percent on any accessible path of travel.
- C. Albedo Reflectance of Finish Concrete: 0.30, minimum.
- D. Treads, Risers, and Nosings: CBC Ch. 11B-504
  - 1. Exterior stairs shall have the upper approach and all treads marked by a stripe providing clear visual contrast.
  - 2. The stripe providing clear visual contrast shall be a minimum of 2 inches wide to a maximum of 4 inches wide placed parallel to, and not more than 1 inch from, the nose of the step or upper approach. The stripe shall extend the full width of the step or upper approach and shall be of material that is at least as slip resistant as the other treads of the stair. A painted stripe shall be acceptable. Grooves shall not be used to satisfy this requirement.
  - 3. The radius of curvature at the leading edge of the tread shall be no greater than 1/2 inch. Nosings that project beyond risers shall have the underside of the leading edge curved or beveled. The maximum angle for a riser to slope under the tread shall be 30 degrees from vertical. Nosings shall extend 1-1/4 inch maximum over the tread below.
  - 4. Treads shall be 11 inches deep minimum. Risers shall be 7 inches high maximum and 4 inches high minimum. All steps on a flight of stairs shall have uniform riser heights and uniform tread depths. Open risers are not permitted .

## 2.03 FORM MATERIALS

- A. Wood form material, profiled to suit conditions.
- B. Joint Filler: Preformed; non-extruding bituminous type (ASTM D1751) or sponge rubber or cork (ASTM D1752).
  - 1. Thickness: 1/2 inch.
  - 2. Product:
    - a. WE Cork, Inc; Expansion Joints: [www.wecork.com/#sle](http://www.wecork.com/#sle).
    - b. Substitutions: See Section 01 60 00 - Product Requirements.

## 2.04 REINFORCEMENT

- A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi) yield strength; deformed billet steel bars; unfinished.
- B. Dowels: ASTM A615/A615M, Grade 60 - 60,000 psi yield strength; deformed billet steel bars; unfinished finish.
- C. Provide supports for reinforcement to position the bars at mid depth of the concrete. Plastic and/or steel chairs, and dobies are acceptable.

## 2.05 CONCRETE MATERIALS

- A. Obtain cementitious materials from same source throughout.
- B. Cement: ASTM C150/C150M, Sulfate Resistant - Type V Portland cement, gray color.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 3
--	------------	-------------------------------

- C. Fine and Coarse Mix Aggregates: ASTM C33/C33M.
- D. Water: Clean, and not detrimental to concrete.
- E. Chemical Admixtures: ASTM C494/C494M, Type A - Water Reducing, Type C - Accelerating, and Type G - Water Reducing, High Range and Retarding.
  - 1. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

## 2.06 ACCESSORIES

- A. Curing Compound: ASTM C309, Type 1-D, Class A.
  - 1. Comply with all applicable air pollution requirements.
- B. Liquid Surface Sealer: <>
  - 1. Penetrating High solids, acrylic curing and sealing compound: Minimum 25% non-yellowing, acrylic solids curing compound; shall conform to ASTM C309 and/or ASTM C1315, Type I, Class A, VOC compliant.
    - a. Products:
      - 1) Laticrete International, Inc.; L&M Aquapel Plus: [www.lmcc.com](http://www.lmcc.com).
      - 2) L.M. Scofield Company (Sika Brand); Cureseal-W: [www.scofield.com](http://www.scofield.com).
      - 3) W. R. Meadows Company; Intraguard: [www.wrmeadows.com](http://www.wrmeadows.com).
      - 4) Substitutions: See Section 01 6000 - Product Requirements.
- C. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
  - 1. Material: Closed-cell, non-absorbent, compressible polymer foam in sheet form.
- D. Self-Leveling Polyurethane Sealant: ASTM C920, Grade P, Uses M and A; single or multicomponent; explicitly approved by manufacturer for traffic exposure; not expected to withstand continuous water immersion .
  - 1. Movement Capability: Plus and minus 25 percent, minimum.
  - 2. Hardness Range: 35 to 55, Shore A, when tested in accordance with ASTM C661.
  - 3. Color: To be selected by Architect from manufacturer's standard range.
  - 4. Service Temperature Range: Minus 40 to 180 degrees F.
  - 5. Products:
    - a. Pecora Corporation: [www.pecora.com/#sle](http://www.pecora.com/#sle).
    - b. Sherwin-Williams Company; Stampede 1SL Polyurethane Sealant: [www.sherwin-williams.com/#sle](http://www.sherwin-williams.com/#sle).
    - c. Sika Corporation; Sikaflex-1c SL: [www.usa.sika.com/#sle](http://www.usa.sika.com/#sle).
    - d. Or Equal Substitutions: See Section 01 60 00 - Product Requirements.

## 2.07 CONCRETE MIX DESIGN

- A. Proportioning Normal Weight Concrete: Comply with ACI PRC-211.1 recommendations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 4
--	------------	-------------------------------

- B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience or trial mixtures, as specified in ACI SPEC-301.
  - 1. For trial mixtures method, employ independent testing agency acceptable to Architect for preparing and reporting proposed mix designs.
- C. Admixtures: Add acceptable admixtures as recommended in ACI PRC-211.1 and at rates recommended by manufacturer.
- D. Concrete Properties:
  - 1. Compressive strength, when tested in accordance with ASTM C39/C39M at 28 days; As scheduled.
  - 2. Water-Cement Ratio: Maximum 40 percent by weight, or according to indicated concrete strength..
  - 3. Maximum Slump: 4 inches.

## **2.08 MIXING**

- A. Transit Mixers: Comply with ASTM C94/C94M.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

### **3.02 PREPARATION**

- A. Project Conditions:
  - 1. Water and Dust Control: Maintain control of concrete dust and water at all times. Do not allow adjacent planting areas to be contaminated.
- B. Moisten base to minimize absorption of water from fresh concrete.
- C. Notify Architect minimum 24 hours prior to commencement of concreting operations.

### **3.03 COORDINATION WITH EXISTING CONSTRUCTION**

- A. Connection to Existing Construction: Where new concrete is doweled to existing construction, drill holes in existing concrete, insert steel dowels and pack with non-shrinking grout.
- B. Preparation of Existing Concrete: Prepare previously placed concrete by cleaning with steel brush and apply bonding agent in accordance with manufacturer's instructions.

### **3.04 FORMING**

- A. Place and secure forms to correct location, dimension, profile, and gradient.
- B. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
- C. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 5
--	------------	-------------------------------

### 3.05 REINFORCEMENT

- A. Place reinforcement at midheight of slabs-on-grade.
  - 1. Locate reinforcement to provide required cover by concrete. If not otherwise indicated on Drawings, provide concrete cover in compliance with ACI 318.
  - 2. Reinforcement Spacing: Space reinforcement as indicated on Drawings or in Standard Specifications, whichever is more stringent. If not indicated, maintain clear spacing of two times bar diameter but not less than 1-1/2 inch nor less than 1-1/3 times maximum size aggregate.
  - 3. Reinforcement Supports: Provide load bearing pads under supports or provide precast concrete block bar supports.
- B. Interrupt reinforcement at contraction and expansion joints.
- C. Place dowels to achieve pavement and curb alignment as detailed.
  - 1. Secure tie dowels in place before depositing concrete.
  - 2. Provide No. 3 bars, 18 inch long at 24 inches O.C. for securing dowels where no other reinforcement is provided.

### 3.06 COLD AND HOT WEATHER CONCRETING

- A. Follow recommendations of ACI PRC-305 when concreting during hot weather.
- B. Follow recommendations of ACI PRC-306 when concreting during cold weather.
- C. Do not place concrete when base surface temperature is less than 40 degrees F, or surface is wet or frozen.

### 3.07 PLACING CONCRETE

- A. Place concrete in accordance with ACI PRC-304.
  - 1. Mixing: If batch plant is within travel time not exceeding maximum limits, transit mix concrete in accordance with ASTM C94/C94M. If travel time exceeds limits, provide alternative means for mixing and submit for review and approval.
- B. Do not place concrete when base surface is wet.
- C. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.
- D. Place concrete continuously over the full width of the panel and between predetermined construction joints. Do not break or interrupt successive pours such that cold joints occur.
- E. Place concrete to pattern indicated.

### 3.08 JOINTS

- A. Align curb, gutter, and sidewalk joints.
- B. Place 1/2 inch wide expansion joints at 20 foot intervals and to separate paving from vertical surfaces and other components and in pattern indicated.
  - 1. Form joints with joint filler extending from bottom of pavement to within 1/2 inch of finished surface.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 6
--	------------	-------------------------------

2. Secure to resist movement by wet concrete.
  3. If expansion joints are not indicated, conform to SSPWC (Greenbook) and standard details and specifications of authorities having jurisdiction.
- C. Provide scored joints.
1. Tooled Joints: 1-inch deep by 3/16-inch wide tooled joints with 1/8-inch radius corners.
  2. At 5 feet intervals for pedestrian paving.
  3. Between sidewalks and curbs.
  4. Between curbs and pavement.
- D. Provide keyed joints as indicated.
- E. Saw cut contraction joints 3/16 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.

### 3.09 FINISHING

- A. Sidewalk Paving: Light broom, texture perpendicular to direction of travel with troweled and radiused edge.
- B. Place sealer on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.

### 3.10 SEALANT INSTALLATION

- A. Install this work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
- B. Provide joint sealant installations complying with ASTM C1193.
- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- D. Measure joint dimensions and size joint backers to achieve the following, unless otherwise indicated:
  1. Width/depth ratio of 2:1.
  2. Neck dimension no greater than 1/3 of the joint width.
  3. Surface bond area on each side not less than 75 percent of joint width.
- E. Install bond breaker backing tape where backer rod cannot be used.
- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.
- G. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

### 3.11 TOLERANCES

- A. ACI 301, Class B, except paving in public rights-of-way shall conform to SSPWC (Greenbook).
- B. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 7
--	------------	-------------------------------



- C. Maximum Variation From True Position: 1/4 inch.
- D. Control-joint grooves and other conspicuous lines:
  - 1. 1/4 inch maximum in any 20 feet.
  - 2. 1/2 inch maximum in any 40 feet.
- E. Variation in Cross-Sectional Thickness of Slabs:
  - 1. Minus 1/4 inch.
  - 2. Plus 1/2 inch.
- F. Coefficient of Friction for Finish Surface:
  - 1. Pedestrian Finish Surface: Minimum 0.6 static coefficient of friction is required for all concrete paving finish surface. All concrete paving surfaces to be broom finish.
  - 2. Ramps: Minimum 0.8 static coefficient of friction is required for all concrete paving finish surfaces on ramps. All concrete paving surfaces on ramps to be broom finish.

### 3.12 FIELD QUALITY CONTROL

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 40 00 - Quality Requirements.
  - 1. Provide free access to concrete operations at project site and cooperate with appointed firm.
  - 2. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.
  - 3. Tests of concrete and concrete materials may be performed at any time to ensure compliance with specified requirements.
- B. Compressive Strength Tests: ASTM C39/C39M; for each test, mold and cure three concrete test cylinders. Obtain test samples for every 75 cu yd or less of each class of concrete placed.
  - 1. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.
  - 2. Perform one slump test for each set of test cylinders taken.
- C. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

### 3.13 PROTECTION

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.
  - 1. Provide lumber ramping and plywood covering where curbs and gutters are subject to vehicular and equipment traffic during construction.

## END OF SECTION

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Site Concrete 32 13 13 - 8
--	------------	-------------------------------

**SECTION 32 18 16.13**  
**PLAYGROUND PROTECTIVE SURFACING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Removal of existing protective surfacing and correction of grades as necessary.
- B. Protective surfacing for playground area.
- C. Subbase under resilient surfacing.
- D. Containment curbs.

**1.02 RELATED REQUIREMENTS**

- A. Section 32 13 13 - Site Concrete: Subbase for resilient surfacing.

**1.03 REFERENCE STANDARDS**

- A. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ASTM D1335 - Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings.
- C. ASTM D1335 - Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings.
- D. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- E. ASTM D1577 - Standard Test Methods for Linear Density of Textile Fibers.
- F. ASTM D2047 - Standard Test Method for Static Coefficient of Friction of Polish-Coated Flooring Surfaces as Measured by the James Machine.
- G. ASTM D2256/D2256M - Standard Test Method for Tensile Properties of Yarns by the Single-Strand Method.
- H. ASTM D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials.
- I. ASTM D3218 - Standard Specification for Polyolefin Monofilaments.
- J. ASTM D5034 - Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test).
- K. ASTM D5793 - Standard Test Method for Binding Sites per Unit Length or Width of Pile Yarn Floor Coverings.
- L. ASTM D5823 - Standard Test Method for Tuft Height of Pile Floor Coverings.
- M. ASTM D5848 - Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings.
- N. ASTM F1292 - Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment.
- O. ASTM F1487 - Standard Consumer Safety Performance Specification for Playground Equipment for Public Use.
- P. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 1
--	------------	--

- Q. ASTM F1951 - Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
- R. CPSC Pub. No. 325 - Public Playground Safety Handbook.

#### 1.04 DEFINITIONS

- A. Use Zone: The area beneath and immediately adjacent to a play structure or equipment (play event) that is designated for unrestricted circulation around equipment, and on whose surface it is predicted that a user would land when falling from or exiting the equipment.
- B. Critical Fall Height: The maximum fall height at which the protective surfacing meets the requirements of ASTM F1292.
- C. High Play Activity Area: Areas where the fall height is especially great, such as at swings. A high play activity area is defined only where the protective surfacing of the entire playground area is not designed for the greatest fall height. High play activity areas are defined on the drawings.
- D. Fall Height: The vertical distance between the finished elevation of the designated play surface and the finished elevation of the protective surfacing beneath it as defined by ASTM F1487.
- E. Protective Surfacing: Resilient ground surfacing. The characteristics of the protective surfacing are based on the fall height of the playground equipment. Changes in either the surfacing or the fall height, particularly reducing the resilience of the protective surfacing or increasing the fall height, will reduce safety-related performance.
- F. Subbase: A layer under the resilient layer of the protective surfacing but over the subgrade; may be rigid, as in concrete or bituminous, or aggregate.
- G. Subgrade: The surface of the ground on which the protective surfacing is installed.

#### 1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements - Administrative Requirements, for submittal procedures.
- B. Product Data: For all manufactured surfacing products, provide manufacturer's product data showing materials of construction, compliance with specified standards, installation procedures, and safety limitations.
  - 1. Include IPEMA certifications where required.
  - 2. Treated Wood Products: Provide information on wood treatment chemical content, toxicity level, and life-cycle durability.
- C. Shop Drawings: Detailed scale drawings showing locations of existing playground equipment and exposed footings, bases, and anchorage points.
  - 1. Clearly identify footing and base elevations in relation to a fixed survey point on site and to subgrade elevation and depth of protective surfacing, surveyed by land surveyor licensed in California.
  - 2. Show locations of underground utilities, storm-drainage system and irrigation system.
  - 3. Show locations of related construction such as walkways and roadways, fences, site furnishings, and plantings.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 2
--	------------	--

4. Show measured fall height for each playground equipment item, determined in accordance with ASTM F1487.
5. Show Use Zone perimeters, determined in accordance with ASTM F1487.
- D. Samples: For each product for which color must be selected provide color chart showing full range of colors.
- E. Samples: Provide the following prior to ordering material:
  1. Synthetic Grass carpet: Two 12 inch by 12 inch (305 mm by 305 mm) pieces.
  2. Infill material: One 1 gallon bag for each type.
  3. Seamed synthetic grass carpet: Two 12 inch by 24 inch (305 mm by 610 mm) pieces seamed together for each seaming method indicated on drawings.
  4. Shock absorbing material: Two 1 gallon bags for each type.
- F. Percolation Test Report: Describing test method used and results.
- G. Certification: Provide IPEMA certification of ASTM F1292 Critical Fall Height at thickness specified.
- H. Testing Certification: Submit certified copies of independent (third-party) laboratory reports on ASTM testing:
  1. Pile Height, Face Weight & Total Fabric Weight, ASTM D5848.
  2. Primary & Secondary Backing Weights, ASTM D5848.
  3. Tuft Bind, ASTM D1335.
  4. Grab Tear Strength.
  5. Water Permeability, ASTM D4491/D4491M.
- I. Maintenance Data:
  1. For manufactured surfacing products, provide manufacturer's recommended maintenance instructions and list of repair products, with address and phone number of source of supply.
  2. For loose fill surfacing products, provide detailed re-ordering information to enable District to match installed material exactly.
- J. Manufacturer's Field Report.

#### 1.06 QUALITY ASSURANCE

- A. Maintain one copy of the latest edition of ASTM F1487 and CPSC Pub. No. 325 at project site.
- B. Manufacturer Qualifications: Company regularly engaged in manufacturing products specified in this section, with not less than three years of documented experience.
  1. Surfacing installed in minimum 10 sites and been in successful service minimum 5 years.
  2. Provide certificate of Insurance AA rated for minimum 1,000,000 dollars covering both product and general liability.
  3. Manufacturer's Representative: Provide name, company name and address, and qualifications.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 3
--	------------	--

- C. Installer Qualifications: Company certified by manufacturer for training and experience installing the protective surfacing; provide installer's company name and address, and training and experience certificate.
  - 1. Minimum experience of at least 5 years, actively installing and maintaining in-fill synthetic turf project of similar size.
  - 2. Provide a list of references based on previous installations.
  - 3. Established, insured installation firm experienced as a premium turf installer with suitable equipment and supervisory personnel, with a minimum of 5 years' experience with 15-foot-wide tufted materials.

#### **1.07 PRE-INSTALLATION MEETING**

- A. Convene a meeting one week before starting earthwork for playground to discuss coordination between various installers.
  - 1. Require attendance by personnel responsible for grading and installers of playground equipment, protective surfacing, footings, and adjacent work.
  - 2. Include representatives of Contractor.
  - 3. Notify Architect at least 2 weeks prior to meeting.

#### **1.08 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, handle, and store protective surfacing to project site in accordance with manufacturer's recommendations.
- B. Store materials in a dry, covered area, elevated above grade.

#### **1.09 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals - Closeout Submittals, for additional warranty requirements.
- B. Provide minimum eight year warranty for playground surfacing.
  - 1. Provide a warranty policy by the manufacturer, against defects in materials and workmanship. Defects shall include, but not be limited to ultraviolet ray fading, degradation, or excessive wear of fiber.
    - a. Not to fade or fail (as distinguished from a change in texture) or have a pile height decrease to 50% of pile height as result of UV degradation.
  - 2. Warranty shall be for full replacement of any damaged product within the warranty period. Warranty shall be comprehensive and sufficient to replace all turf if necessary.
  - 3. Warranty shall become effective from the date of substantial completion.
  - 4. The Warranty shall contain no usage limits for warranted turf.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 4
--	------------	--

## **PART 2 PRODUCTS**

### **2.01 REGULATORY REQUIREMENTS**

- A. Ground surfaces on accessible routes, clear floor or ground spaces, and turning spaces for play areas shall comply with CBC Section 11B-1008.2.6 as follows:
  - 1. Ground surfaces shall be inspected and maintained regularly and frequently to ensure continued compliance with ASTM F1951.
  - 2. Ground surfaces located within use zones shall comply with ASTM F1292 (1999 edition or 2004 edition).

### **2.02 PERFORMANCE CRITERIA**

- A. Because the safety of the playground depends on strict compliance with the performance criteria, this information is provided for Contractor's information.
  - 1. The protective surfacing constitutes a resilient layer installed over a non-resilient layer, which is installed over the subgrade, with the top of playground equipment footings and anchorage devices covered by full depth of the resilient portion of the protective surfacing.
  - 2. The total depth available for protective surfacing, from surface of subgrade, is indicated on drawings.
  - 3. The top elevation of the protective surfacing is intended to be flush with adjacent grades.
    - a. Comply with CBC 11B-1008.2.6.1 and ASTM F1951.
  - 4. Use Zone: The protective surfacing has been designed to provide acceptable impact attenuation as defined in ASTM F1292 for Critical Height of 4 feet.
  - 5. High Play Activity Area: The protective surfacing has been designed to provide impact acceptable attenuation as defined in ASTM F1292 for Critical Fall Height of 10 feet.
- B. If deviation from specified depth is required, it is the Contractor's responsibility to make all changes required to maintain specified top elevation and required impact attenuation at no extra cost to District; obtain approval prior to proceeding; follow approval request procedure as specified for substitutions.

### **2.03 MATERIALS**

- A. Poured-In-Place Membrane Surfacing: Weather-resistant wear layer over impact attenuating substrate over aggregate subbase.
  - 1. Wear Layer: Ethylene propylene diene monomer (EPDM) particles adhered with a ultraviolet-stabilized polyurethane binder to produce an even, uniformly colored surface.
  - 2. Wear Layer Thickness: 3/8 inch, minimum.
  - 3. Coefficient of Friction, when wet: 0.8, minimum, when tested in accordance with ASTM D2047.
  - 4. Wear Layer Color(s): As selected from manufacturer's full range of bright colors.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 5
--	------------	--

5. Impact Attenuating Substrate: 100 percent recycled shredded styrene butadiene rubber (SBR) shreds or granules with 100 percent solids polyurethane binder to form a resilient material; do not use foam rubber.
  6. Resilient Depth: As required to achieve specified Critical Fall Height as defined in ASTM F1292 but not more than depth indicated; maintain top elevation flush with adjacent grades.
  7. Certification: Provide IPEMA certification of ASTM F1292 Critical Fall Height at thickness specified.
  8. Manufacturers:
    - a. GameTime, Inc: [www.gametime.com](http://www.gametime.com).
    - b. No Fault Sport Group; No Fault Safety Surface for Playgrounds: [www.nofault.com/#sle](http://www.nofault.com/#sle).
    - c. Play Safe Surfacing, Inc: [www.playsafesurfacing.com](http://www.playsafesurfacing.com).
    - d. Hanover Specialties Inc: [www.vitriturf.com](http://www.vitriturf.com).
    - e. Surface America; PlayBound Poured-in-Place: [www.surfaceamerica.com](http://www.surfaceamerica.com).
    - f. Substitutions: See Section 01 60 00 - Product Requirements.
  9. Accessories: Provide manufacturer's standard containment curbs and tapered transition elements to support surfacing between changes of surface grade.
- B. Synthetic Turf Surfacing: Synthetc turf, and resilient infill material over drainage aggregate subbase.
1. Basis of Design Product: 921 Tot Turf Pro Play Plus as manufactured by Robertson, [www.totturf.com](http://www.totturf.com), or approved equal.
  2. System Description:
    - a. Synthetic turf system including drainage, synthetic turf, and resilient infill material.
    - b. Underlayment System consisting of porous closed composite materials. Thickness and density of panels shall be sufficient so that system meets the fall height requirements.
    - c. Underlayment system consisting of 100% recycled Tire Buffings mixed with a urethane binder (min 10%).
  3. Turf Fiber:
    - a. Minimum Tuft bind to Backing: 10 pounds.
    - b. Weight: 55 ounces per square yard, minimum.
    - c. Fiber: Non-abrasive and a minimum of 100 microns thick.
    - d. Lead Chromate Content: Less than 100 ppm of in all colors.
    - e. Turf fibers must be from the same dye lots.
    - f. Lisport Studded Roll Test Machine: Must retain a minimum of 75% of its original fibril width after 10,000 cycles.
    - g. Pile Fiber Characteristics: Fiber manufacturer must be from the same source.

Characteristic	Value	Test
----------------	-------	------

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 6
--	------------	--

Linear Density (Denier)	13600	ASTM D1577
Yarn Thickness	100 Microns (PE mono); 100 Microns (PP)	ASTM D3218
Tensile Strength	71 N (PE Mono);16 N (PP)	ASTM D2256/D2256M
Pile Weight*	55 oz./yd2	ASTM D5848

The above specifications are nominal. \*Values are +/- 5%.

h. Pile Fabric Characteristics:

Characteristic	Value	Test
Finished Pile Height*	1.75 inch (45mm)	ASTM D5823
Product Weight (total)*	82 oz./yd2	ASTM D3218
Primary Backing Weight*	7.4 oz./yd2	ASTM D2256/D2256M
Secondary coating Weight**	20 oz./yd2	ASTM D5848
Fabric Width	15 feet (4.57m)	ASTM D5793
Tuft Gauge	3/8 inch	ASTM D5793
Grab Tear Strength	200-1b-F	ASTM D5034
Tuft Bind	>10-1b-F	ASTM D1335
Infill (Sand)	2 lbs Silica Sand	None

Except where noted as a minimum, the above specifications are nominal.

\* Values are +/- 5%. \*\*All values are +/- 3 oz./yd2.

4. Backing Material

a. Primary Backing:

- 1) Dual layered woven polypropylene material.
- 2) System Weight: 7.0 ounces/square yard, minimum.

b. Secondary Backing:

- 1) System Weight: 20 ounces/square yard, minimum.
- 2) Secondary backing to saturate the primary backing and effectively lock the fiber tufts in place to the primary backing.
- 3) Heat activated polyurethane coating with no vegetable based polyols.
- 4) Tuft Bind Strength: 10 pounds, minimum.
- 5) Drainage Perforations: 3/16 to 1/4 inch diameter at 4 inches or less on center each way. Non-perforated backing is not acceptable.

5. Turf Roll Seams: Sewn or glued on site so that no openings larger than the porous backing mat openings are created. All turf fabric edges to be securely bound as per the perimeter detail design.

6. Fabric Surface: Constructed and installed in minimum widths of 15 feet with no longitudinal or transverse seams.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 7
--	------------	--



7. System to be resistant to weather, including ultra-violet light and heat degradation; insects, rot, mildew and fungus growth and be non-allergenic and non-toxic.
  8. Non-combustible and pass the DIN standard Pill Burn test or ASTM D2859.
- C. Envirofill: Infill for synthetic/artificial turf this product consists of silicon dioxide coated with an acrylic polymer. HAZARDS DISCLOSURE: This product does not contain known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. This product should be classified as NOT being toxic, corrosive, skin/eye irritants, or a strong sensitizer as defined in 16 CFR 1500.3(b)(5), and 1500.3(b)(7) – (9) of the Federal Hazardous Substances Act.
1. Odor: Odorless.
  2. pH-Value: Not applicable.
  3. Change in Condition: Melting point/Melting range: 1713 °C (3115 °F); Boiling point/Boiling range: 2230 °C (4046 °F).
  4. Flash Point: None.
  5. Flammability (solid, gaseous): Product is not flammable.
  6. Auto Igniting: Product is not self-igniting.
  7. Vapor Pressure @ 1732 °C (3150 °F) - 13.5 hPa (10 mm Hg).
  8. Density @ 20 °C (68 °F) - 2.9-3.1 g/cm<sup>3</sup> (24.201-25.87 lbs/gal).
  9. Bulk Density: 110 (lbs per cu ft).
  10. Evaporation Rate - Not applicable.
  11. Solubility in / Miscibility with: Water - Insoluble.
  12. Solvent Content: Organic solvents - 0.0 %; Solids content - 100.0 %.
  13. Other Information: No further relevant information available.
- D. Pad Underlayment:
1. TotTurf pad standard recycled, non-contaminated, postindustrial cross link, closed cell polyethylene- polyolefin foam pad from Robertson Industries, Inc.
    - a. Foam Type: Polyethylene - Polyolefin.
    - b. Bulk Density: 4.0 – 6.0 lb/cu ft.
    - c. Effective Size: 24 Sq ft (net coverage).
    - d. Tensile Strength: 80-20 psi.
  2. 100% Recycled Tire Buffings mixed with a urethane binder (min 10%).
- E. Geotextile: Nonwoven polypropylene sheet.
- F. Containment Curbs: Cast-in-place concrete; free of sharp vertical edges, protruding elements, and trip hazards.
1. Size(s): As indicated on drawings.
  2. Minimum Edge Radius: 1/2 inch.
- G. Drainage Pipes: Uniform material, free of defects:
1. Material: Polyvinyl Chloride.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 8
--	------------	--

2. Shape: Round.
3. Perforations: As determined by percolation report.
4. Size: As determined by percolation report.

#### **2.04 SUBBASE**

- A. Drainage (Base Stone) Course: Fractured, non-rounded gravel; washed; free of dust, clay, dirt, organic material, hazardous substances, or foreign objects; rounded particles, either naturally or mechanically; sieved in compliance with ASTM C136/C136M in the specified gradation range.
  1. Percent Passing Sieve Size 1 inch: 100 percent.
  2. Percent Passing Sieve Size 3/4 inch: 90 to 100 percent.
  3. Percent Passing Sieve Size No. 4: 35 to 60 percent.
  4. Percent Passing Sieve No. 3010: 30 percent.
  5. Percent Passing Sieve No. 200: 2 to 9 percent.
  6. Depth: 4 inches, minimum.
  7. Sand used in this material: Washed clean and free of soil based materials.

#### **2.05 ACCESSORIES**

- A. Fasteners, Synthetic Grass to Edging: As required by manufacturer; up to 3/4 inch (19 mm) stainless steel staples, in compliance with ASTM F1667.
- B. Fastening, Seams:
  1. Sewing Thread: As recommended by manufacturer.
  2. Adhesive Products: Nordot 34G, Mapei 2K, Turf Claw, hot melt technology or equivalent as approved by the manufacturer.
  3. Any adhesive products required for the installation of a proposed turf system shall be purpose-suited to the system. The material and application methods, as recommended by the adhesive manufacturer.

### **PART 3 EXECUTION**

#### **3.01 PREPARATION FOR REPLACEMENT OF EXISTING LOOSE FILL SURFACING**

- A. Remove existing loose fill.
- B. Measure the location of all playground elements, including perimeter of existing protective surfacing, access and egress points, hard surfaces, walls, fences, and structures, and planting locations.
- C. Stake the layout of the entire Use Zone perimeter before starting any work, based on Contract Documents.
  1. Verify that Use Zone perimeters do not overlap hard surfaces, whether currently installed or not.
  2. Do not proceed until revised drawings have been provided, showing corrected layout.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 9
--	------------	--

- D. Inside Use Zones remove all obstructions that would extend into the resilient protective surfacing.
- E. After subgrade is correct, mark intended depth of surfacing on the base supports of each item of playground equipment using paint or tape in a manner that will be easily verifiable during installation of surfacing.
- F. Perform percolation test at the lowest elevation of the subgrade in the areas to be covered by protective surfacing.
  - 1. Report results to Architect.
  - 2. If percolation is less than 1 inch in a 3 hour period, do not proceed.

### 3.02 SITE INSPECTION

- A. The inspection shall include a check for planarity. The finished surface shall not vary from a true plane more than 1/4 inch in 10 feet when measured in any direction. The Contractor shall provide all required tools and materials needed for the planarity check, which may include but not be limited to, a laser level, string line, straight edge and/or other assessment materials. The Contractor shall mark in the field any deviations from grade in excess of those specified above, as well as provide a marked-up plan locating the deviations. Correct any deviations to the satisfaction of the Architect and Synthetic Turf installer.
- B. The compaction of aggregate base shall be 95% to Standard Proctor and surface tolerances shall not exceed ¼ inch over 10 feet.
- C. Have a state registered surveyor conduct an elevation survey of the area in a 25' grid to determine and verify that subgrade elevations and slopes are within previously specified tolerances. This elevation survey may require further verification of smaller areas within the 25' grid if determined necessary by the Architect.
- D. When any or all corrective procedures have been completed, the finished sub-base surface must be re-inspected, with the same representatives attending as the initial inspection. If required, additional repair and inspections are to be conducted until the subbase surface is deemed acceptable by the Architect and Synthetic Turf Installer
- E. Once the sub-base surface has been deemed acceptable, the Contractor shall submit a written certificate indicating the acceptance of:
  - 1. The sub-base construction finished surface as totally suitable for the application of the selected synthetic turf system, and;
  - 2. The sub-base construction as totally suitable for work under this section to proceed with the final installation and fully warrant the playground surface installation for the period and conditions specified herein.
- F. Commencement of work under this section shall constitute acceptance of the work completed under other sections by the Contractor, acceptance of dimensions of the subbase, and hence, no claims for extra work based upon these conditions will be permitted.

### 3.03 EXAMINATION

- A. Playground equipment installer will perform playground layout prior to installation of footings; verify correctness of layout before starting this work.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 10
--	------------	---

- B. Verify that playground equipment and site furnishings and irrigation system located within playground area are complete.
- C. Verify location of underground utilities and facilities in the playground area. Damage to underground utilities and facilities will be repaired at Contractor's expense.
- D. Verify that subgrades are at proper elevations and that smooth grading is complete.
- E. Verify that proper depth of surfacing is marked on base supports of playground equipment.

### 3.04 PREPARATION

- A. Maintain all benchmarks, monuments, and other reference points. If disturbed or destroyed, replace as directed.
- B. Correct subgrade irregularities to ensure that required depth of protective surfacing can be installed, and subgrade elevation is in accordance with manufacturer's requirements.
- C. Keep adjacent streets, sidewalks, and property free of mud, dirt, or similar nuisances resulting from earthwork operations.
- D. Inside Use Zones remove all obstructions that would extend into the resilient protective surfacing.
- E. Remove rocks, debris, and other similar items.
- F. Install containment curbs with top surface flush with intended elevation of top surface of protective surfacing.

### 3.05 SUBBASE

- A. Cover Subgrade with Geotextile:
  - 1. Lap minimum 4 inches width at seams. Adhere seams in accordance with manufacturer's recommendations.
  - 2. Install smooth, and free of tensile stresses, folds, or wrinkles.
  - 3. Protect from clogging, tears, or other damage during surfacing installation.
  - 4. Repair or replace damaged geotextile in accordance with manufacturer's recommendations.
- B. Install aggregate subbase as indicated on drawings. Compact aggregate to maximum 95 percent, in accordance with ASTM D1557.
  - 1. Sub-Base Requirements: Base to have the specific minimum slope (2%) and vary no more than 1/8 inch when measured in any direction with a 10 foot straight edge.
- C. Maintain porosity for direct drainage.
- D. Provide perforated pipe or similar system subsurface drainage under and around stone base.
- E. Stone base course must be surrounded by a retaining curb.
- F. Install with top surface of subbase no higher than grades and levels indicated and not more than 1/4 inch lower than grades and levels indicated.
- G. Install in true, even plane, sloped to provide positive drainage.
- H. Flatness Tolerance: 1/4 inch in 10 feet, maximum, and 1/8 inch in 3 foot direction.
- I. Cure subbase at least 7 days but not less than required by manufacturer of resilient surfacing.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 11
--	------------	---

### 3.06 RESILIENT SURFACING LAYER

- A. Install in accordance with CPSC Pub. No. 325, ASTM F1487, manufacturer's instructions, and requirements of authorities having jurisdiction (AHJ).
- B. Install proper thickness throughout Use Zone(s).
- C. Clean and dry surface of subbase.
- D. Cover aggregate subbase with geotextile:
  - 1. Verify that aggregate is free of ruts or protruding objects.
  - 2. Lap minimum 4 inches width at seams. Adhere seams in accordance with manufacturer's recommendations.
  - 3. Install smooth, and free of tensile stresses, folds, or wrinkles.
  - 4. Protect from clogging, tears, or other damage during surfacing installation.
  - 5. Repair or replace damaged geotextile in accordance with manufacturer's recommendations.
- E. Poured In Place Surfacing:
  - 1. Mix components mechanically on-site in accordance with manufacturer's directions; do not mix by hand.
  - 2. Install seamlessly; ensure complete bond to subbase.
  - 3. Cover footings and foundations and adhere tightly around penetrating elements.
  - 4. Maintain full thickness of resilient layers within Use Zone; cover or abut containment curbs as indicated on drawings; completely cover tapered transition edges.
  - 5. Hand trowel exposed surface to smooth, even finish.
  - 6. Impact Attenuation Layer: Install entire layer in one continuous pour on the same day.
  - 7. Wear Surface: Bond wear surface to substrate with adhesive. Apply adhesive in small quantities so that wear surface can be applied before adhesive dries.
    - a. Install surfacing seamlessly. When wear surface is composed of different color patterns, pour surface continuously and seamlessly.
    - b. When seams are required due to color change or field conditions, place adjacent wear surface as soon as possible, before initial pour has cured. Coat edge of initial pour with adhesive and apply wear surface mixture immediately.
    - c. Add a minimum of 1/16 inch depth to specified surfacing depth to ensure required impact attenuation performance is met.
    - d. Install wear surface to cover foundations and adhere tightly around elements penetrating the surface.

### 3.07 TURF INSTALLATION

- A. Install synthetic turf surfacing only when ambient air temperature is 35 F or above and the relative humidity is below 35% or as specified by the product manufacturer. Installation will not proceed if rain is imminent.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 12
--	------------	---

- B. Install synthetic turf system in accordance with the manufacturer's written installation instructions.
- C. Install product only when prepared base is suitably free of dirt, dust, and petroleum products, is moisture free and sufficiently secured to prevent unwanted pedestrian and vehicular access.
- D. Turf shall be attached to the perimeter edge as shown in the construction plans and as per the manufacturer.
  - 1. Layout composite nailer boards. Approval of locations by Architect required prior to installing.
  - 2. Install along full perimeter of synthetic grass.
  - 3. Fasten to border with case hardened screws at 24 inch on center, minimum.
  - 4. Set top of edging flush or recessed 1/2 inch below top of border, maximum.
- E. All seams shall be brushed thoroughly before infill materials are installed.
- F. All terminations shall be as detailed and approved in the shop drawings.
- G. Thoroughly brush the synthetic turf prior to installation of infill materials to remove wrinkles.
- H. Turf shall remain free draining at all times before, during and after the infill materials are installed.

### **3.08 LOOSE FILL SURFACING**

- A. Install in accordance with CPSC Pub. No. 325, ASTM F1487, and requirements of authorities having jurisdiction (AHJ).
- B. Cover Subgrade with Geotextile:
  - 1. Lap minimum 4 inches width at seams. Adhere seams in accordance with manufacturer's recommendations.
  - 2. Install smooth, and free of tensile stresses, folds, or wrinkles.
  - 3. Protect from clogging, tears, or other damage during surfacing installation.
  - 4. Repair or replace damaged geotextile in accordance with manufacturer's recommendations.
- C. Install loose fill to depths indicated, with smooth even surface flush with tops of containment curbs.

### **3.09 FIELD QUALITY CONTROL**

- A. Obtain the services of the equipment manufacturer's field representative to review the finished installation for compliance with specified requirements and with design criteria to the extent known to the Contractor; submit report of field review.
- B. District or District's representative will inspect playground surfacing after installation to verify that surfacing is of proper type and depth and that playground meets specified design safety and accessibility requirements.
- C. Repair or replace rejected work until compliance is achieved.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 13
--	------------	---

### 3.10 CLEANING AND PROTECTION

- A. Restore adjacent existing areas that have been damaged from the construction.
- B. Clean playground equipment of construction materials, dirt, stains, filings, and blemishes due to shipment or installation. Clean in accordance with manufacturer's instructions, using cleaning agents as recommended by manufacturer.
- C. Clean playground area of excess construction materials, debris, and waste.
- D. Remove excess and waste material and dispose of off-site in accordance with requirements of authorities having jurisdiction.
- E. Protect installed products until Date of Substantial Completion.
- F. Replace damaged products before Date of Substantial Completion.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Playground Protective Surfacing 32 18 16.13 - 14
--	------------	---

**SECTION 33 42 11**  
**STORMWATER GRAVITY PIPING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Stormwater drainage piping.
- B. Stormwater pipe accessories.

**1.02 RELATED REQUIREMENTS**

- A. Section 31 23 16 - Excavation: Excavating of trenches.
- B. Section 31 23 23 - Fill: Bedding and backfilling.
- C. Section 33 42 30 - Stormwater Drains.

**1.03 REFERENCE STANDARDS**

- A. ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
- B. ASTM D3034 - Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
- C. SSPWC (Greenbook) - Standard Specifications for Public Works Construction.

**1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordination: Coordinate the installation of stormwater gravity piping with size, location and installation of stormwater drains according to Section 33 42 30.
- B. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by all affected installers.
- C. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.

**1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data indicating pipe, pipe accessories.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer's Installation Instructions: Indicate special procedures required to install Products specified.
- E. Field Quality Control Submittals: Document results of field quality control testing.
- F. Project Record Documents:
  - 1. Submit documents under provisions of Section 01 78 00 - Closeout Submittals.
  - 2. Record location of pipe runs, connections, and invert elevations.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Gravity Piping 33 42 11 - 1
--	------------	---



3. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

## **PART 2 PRODUCTS**

### **2.01 REGULATORY REQUIREMENTS**

- A. Comply with applicable code for materials and installation of the Work of this section.
  1. Conform to requirements of California Plumbing Code and Authorities Having Jurisdiction.
- B. Utility Compliance: Comply with local utility regulations and standards pertaining to storm drainage systems.
- C. Environmental Compliance: Comply with applicable portions of local environmental agency regulations pertaining to storm drainage systems.

### **2.02 STORMWATER PIPE MATERIALS**

- A. Provide products that comply with applicable code(s).
- B. Plastic Pipe: ASTM D3034, Type PSM, Poly Vinyl Chloride (PVC) material; inside nominal diameter of 4 to 15 inches, bell and spigot style solvent sealed joint end.
  1. SDR 35, unless indicated otherwise on Drawings.

### **2.03 PIPE ACCESSORIES**

- A. Pipe Joints: Mechanical clamp ring type, stainless steel expanding and contracting sleeve, neoprene ribbed gasket for positive seal, Water Tight.
- B. Fittings: Same material as pipe molded or formed to suit pipe size and end design, in required tee, bends, elbows, cleanouts, reducers, traps and other configurations required.
- C. Filter Fabric: Non-biodegradable, non-woven , AASHTO M288 Class 2. Provide Geosynthetics 315ST manufactured by ADS Advanced Drainage Systems, Inc.; [www.ads-pipe.com](http://www.ads-pipe.com) .
- D. Trace Wire: Magnetic detectable conductor, clear plastic covering, imprinted with "Storm Drain" in large letters.

### **2.04 BEDDING AND COVER MATERIALS**

- A. Bedding: As specified in Section 31 23 23.
- B. Cover: As specified in Section 31 23 23.

## **PART 3 EXECUTION**

### **3.01 TRENCHING**

- A. See Section 31 23 16 - Excavation and Section 31 23 23 - Fill for additional requirements.
- B. Hand trim excavation for accurate placement of pipe to elevations indicated.
- C. Backfill around sides and to top of pipe with cover fill, tamp in place and compact, then complete backfilling.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Gravity Piping 33 42 11 - 2
--	------------	---

### 3.02 INSTALLATION

- A. Verify that trench cut is ready to receive work and excavations, dimensions, and elevations are as indicated on layout drawings.
- B. General Locations and Arrangements: Drawings (plans and details) indicate the general location and arrangement of the underground drainage system piping. Location and arrangement of piping layout take into account many design considerations. Install the piping as indicated, to the extent practical.
  - 1. Install in accordance with SSPWC (Greenbook), local standards and soils report.
  - 2. Install pipe, fittings and accessories in accordance with ASTM D3034 and manufacturer's instructions. Seal joints watertight.
- C. Install pipe, fittings, and accessories in accordance with manufacturer's instructions. Seal watertight.
  - 1. Plastic Pipe: Also comply with ASTM D2321.
- D. Lay pipe to slope gradients noted on layout drawings; with maximum variation from true slope of 1/8 inch in 10 feet.
  - 1. Install piping beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's recommendations for use of lubricants, cements, and other installation requirements.
  - 2. Use fittings for branch connections, except where direct tap into existing sewer or manhole is indicated.
  - 3. Use proper size increasers and couplings, where different size or material of pipes and fittings are connected. Reduction of the size of piping in the direction of flow is prohibited.
  - 4. Install piping pitched down in direction of flow, at minimum slope of 2 percent, except where indicated otherwise.
    - a. Place bell ends of piping facing upstream.
  - 5. Tunneling: Install pipe under paving or other obstructions that cannot be disturbed, by tunneling, jacking, or a combination of both.
- E. Connect to building storm drainage system, foundation drainage system, and utility/municipal system.
- F. Make connections through walls through sleeved openings, where provided.
- G. Install continuous trace wire 6 inches above top of pipe; coordinate with Section 31 23 16.13.

### 3.03 TAP CONNECTIONS

- A. Make connections to existing piping and underground structures so that finished work will conform as nearly as practicable to the requirements specified for new work.
- B. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe, install wye fitting into existing piping, and encase entire wye fitting plus 6 inch overlap, with not less than 6 inches of 3000 psi 28-day compressive-strength concrete.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Gravity Piping 33 42 11 - 3
--	------------	---

- C. Protect existing piping and structures to prevent concrete or debris from entering while making tap connections. Remove debris, concrete, or other extraneous material that may accumulate.

#### **3.04 FIELD QUALITY CONTROL**

- A. Perform field inspection in accordance with Section 01 40 00 - Quality Requirements.
  - 1. Perform testing of completed site piping in accordance with the Plumbing Code using water or air pressure test.
- B. Interior Inspection: Inspect piping to determine whether line displacement or other damage has occurred.
  - 1. Make inspections after pipe between manholes and manhole locations has been installed and approximately 2 feet of backfill is in place, and again at completion of project.
  - 2. If inspection indicates poor alignment, debris, displaced pipe, infiltration or other defects correct such defects, and reinspect.
  - 3. Perform video inspection of all piping prior to final acceptance of work.
    - a. All video operations shall be recorded digitally for playback if required.
    - b. All video inspections will include a detailed narrative identifying exact locations of the installed lines and limits of areas to be re-installed.
- C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to District.

#### **3.05 PROTECTION**

- A. Protect pipe and bedding cover from damage or displacement until backfilling operation is in progress.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Gravity Piping 33 42 11 - 4
--	------------	---

## **SECTION 33 42 30 STORMWATER DRAINS**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Precast concrete catch basins.
- B. Frames and grates.

#### **1.02 RELATED REQUIREMENTS**

- A. Section 31 23 16 - Excavation.
- B. Section 31 23 23 - Fill.
- C. Section 33 42 11 - Stormwater Gravity Piping.

#### **1.03 REFERENCE STANDARDS**

- A. AASHTO HB - Standard Specifications for Highway Bridges.
- B. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary.
- C. ACI PRC-305 - Guide to Hot Weather Concreting.
- D. ACI PRC-306 - Guide to Cold Weather Concreting.
- E. ACI SPEC-301 - Specifications for Concrete Construction.
- F. ASTM C478/C478M - Standard Specification for Circular Precast Reinforced Concrete Manhole Sections.
- G. ASTM C990 - Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.
- H. CBC Ch. 11B - California Building Code-Chapter 11B.
- I. EPA (NPDES) - National Pollutant Discharge Elimination System (NPDES), Construction General Permit.

#### **1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordination: Installation of stormwater drains with piping and other structures.
  - 1. See Section 33 42 11 for stormwater gravity piping.
- B. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section; require attendance by affected installers.
- C. Sequencing: Ensure that utility connections are achieved in an orderly and expeditious manner.

#### **1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Weight rating for catch basins and frame and grates.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Drains 33 42 30 - 1
--	------------	-----------------------------------

- C. Shop Drawings: Indicate stack assembly, invert elevations, opening sizes, and pipe angles.
- D. Manufacturer's Installation Instructions: Indicate special procedures for assembly.
- E. Manufacturer's qualification statement.
- F. Installer's qualification statement.
- G. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- H. Field Quality Control Submittals: Document results of field quality control testing.
- I. Project Record Documents:
  - 1. Record invert elevations of catch basins and trench drains.
  - 2. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

## 1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with at least three years of documented experience.
- B. Installer Qualifications: Company specializing in installing work of the type specified in this section, and with at least three years of documented experience.
- C. Documents at Project Site: Maintain one copy of manufacturer's instructions, assembly drawings, and shop drawings at the project site.
- D. Perform work of this section in accordance with ACI SPEC-301 and ACI CODE-318.
  - 1. Maintain one copy of each document on site.
- E. Follow recommendations of ACI PRC-305 when concreting during hot weather.
- F. Follow recommendations of ACI PRC-306 when concreting during cold weather.

## PART 2 PRODUCTS

### 2.01 CATCH BASINS

- A. Weight Rating: Pedestrian according to AASHTO HB.
- B. Precast Concrete Catch Basins: Comply with ASTM C478/C478M, reinforced.
  - 1. Wall Thickness: Manufacturer's standard.
  - 2. Precast Base Thickness: 2 inches Manufacturer's standard.
  - 3. Reinforcement: Formed steel wire, galvanized finish, wire diameter as indicated on drawings.
  - 4. Joint Sealant: Comply with ASTM C990.
  - 5. Manufacturers:
    - a. Brooks Products; XXXX CB Series: [www.brooksproductsnw.com](http://www.brooksproductsnw.com).
    - b. J&R Concrete Products; CBXXXX Series: [www.jrconcreteproducts.com](http://www.jrconcreteproducts.com).
    - c. Substitutions: See Section 01 60 00 - Product Requirements.
- C. Frames and Grates: Cast iron, pattern as indicated.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Drains 33 42 30 - 2
--	------------	-----------------------------------

## **2.02 CATCH BASIN, TRENCH DRAIN, CLEANOUT, AND AREA DRAIN COMPONENTS**

- A. Lids and Drain Covers: Cast iron, hinged to cast iron frame, lockable and extra heavy duty proof load.
  - 1. At pedestrian areas provide ADA Standards and CBC Ch. 11B compliant grates with maximum 1/2 inch wide openings. Place linear openings perpendicular to path of travel.
  - 2. Catch Basin:
    - a. Lid Design: Linear grill.
    - b. Nominal Lid and Frame Size: 12 by 12 inch.

## **2.03 ACCESSORIES**

- A. Sediment Filter: Provide sediment filter compliant with BMP practice for EPA (NPDES) II, as indicated on Drawings.
  - 1. Product: Storm Water Sediment Control Grate Insert manufactured by Transpo Industries, Inc.: [www.transpo.com](http://www.transpo.com)
- B. Geotextile Filter Fabric:
  - 1. Non-biodegradable, non-woven, AASHTO M 288, Class 2.
  - 2. Provide Geosynthetics 601T manufactured by ADS Advanced Drainage Systems, Inc.; [www.ads-pipe.com](http://www.ads-pipe.com)., or equal.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify items provided by other sections of work are properly sized and located.
- B. Verify built-in items are in proper location and ready for roughing into work.
- C. Verify excavation location and depth are correct.

### **3.02 EXCAVATION AND FILL**

- A. Hand trim excavation for accurate placement to indicated elevations.
- B. Backfill with cover fill, tamp in place and compact, then complete backfilling.
- C. Cover weep holes with 3/4 inch (19 mm) crushed stone.
- D. See Section 31 23 16 for additional excavation requirements.
- E. See Section 31 23 23 for additional fill requirements.

### **3.03 INSTALLATION**

- A. Establish elevations and pipe inverts for inlets and outlets as indicated in drawings.
- B. Grade Adjustments:
  - 1. Place adjacent materials tight and smooth following design grades.
- C. Frames and Grates:
  - 1. Place frame plumb and level.

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Drains 33 42 30 - 3
--	------------	-----------------------------------

2. Place grate in frame securely.

#### **3.04 FIELD QUALITY CONTROL**

- A. See Section 01 40 00 - Quality Requirements for additional requirements.
- B. Perform field inspection for pipe invert elevations.
- C. If inspections indicate work does not meet specified requirements, adjust work and reinspect at no cost to District.

**END OF SECTION**

Grossmont Union High School District <b>Childcare Center Shade Structure</b> RCA Project No. 1-30-65	Addendum 1	Stormwater Drains 33 42 30 - 4
--	------------	-----------------------------------

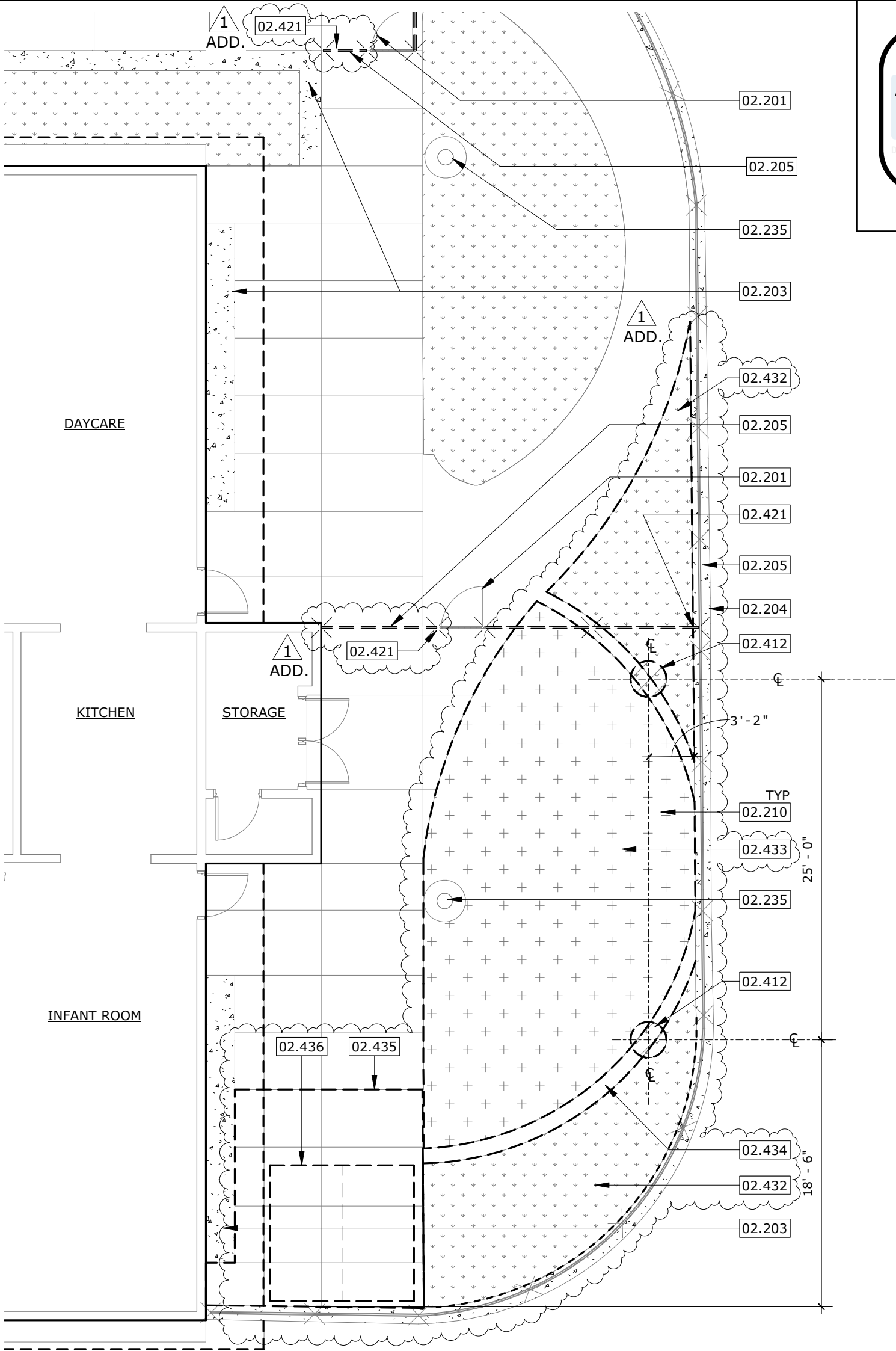
APPROVED  
DIV. OF THE STATE ARCHITECT

APP: 04-121137 INC:

REVIEWED FOR

SS ☒ FLS ☐ ACS ☒

DATE: 08/14/2023



# KEYNOTES

- 02.201  
02.203  
02.204  
02.205  
02.210  
02.235  
02.412  
02.421  
02.432  
02.433  
02.434  
02.435  
02.436
- EXISTING CHAINLINK SINGLE GATE & POSTS TO REMAIN, PROTECT IN PLACE  
EXISTING CONCRETE BENCH  
EXISTING RETAINING WALL TO REMAIN PER A#04-111058  
EXISTING CHAINLINK FENCE TO REMAIN, PROTECT IN PLACE  
EXISTING RUBBER MAT PLAY SURFACE TO REMAIN  
EXISTING LIGHT POLE TO REMAIN, PROTECT IN PLACE  
DEMO PORTION OF (E) TURF AS REQUIRED, CONCRETE & RUBBER MAT AND PREPARE FOR NEW FOOTING  
REMOVE PORTION OF (E) CHAINLINK FENCE FROM GATE POST TO END OF FENCE. STORE ALL PARTS FOR REINSTALLATION  
REMOVE EXISTING ARTIFICIAL TURF  
REMOVE EXISTING RUBBER MAT PLAY SURFACE  
REMOVE EXISTING CONCRETE CURB  
REMOVE PORTION OF EXISTING CONCRETE WALKWAY  
REMOVE, STORE, AND PROTECT EXISTING STORAGE SHED AND RELOCATE PER MODERNIZATION PLAN
- 1  
ADD.

REFERENCE 1/AS-2.0

## ENLARGED DEMO SITE PLAN

## ADDENDUM #1 1/8" = 1'-0"

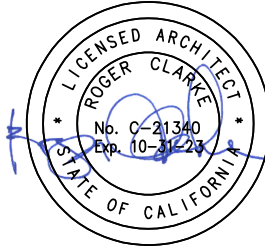
# GROSSMONT HIGH SCHOOL

CHILDCARE CENTER SHADE STRUCTURE  
GROSSMONT UNION HIGH SCHOOL DISTRICT

RUHNAUCLARKE.COM  
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664  
5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

RUHNAU  
CLARKE  
ARCHITECTS

DSA APN #: 04-121137  
DSA File #: 37-H4  
Date: 2023-08-09  
Project #: 1-30-65  
Sheet #: ASK1.01









GATE IDENTIFICATION  
NUMBER, SEE SCHEDULE  
IN SHEET AS-1.0

APPROVED  
DIV. OF THE STATE ARCHITECT

APP: 04-121137 INC:

REVIEWED FOR

SS ☒

FLS ☐

ACS ☒

DATE: 08/14/2023

**EXISTING**



(E)  
CHAINLINK  
FENCE



(E) CONCRETE

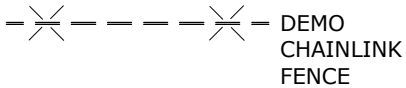


(E) TURF

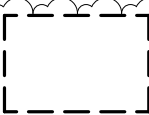


(E) RUBBER MAT  
1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

**DEMOLITION**



DEMO  
CHAINLINK  
FENCE



(E) CONCRETE TO BE REMOVED



(E) TURF TO BE REMOVED



(E) RUBBER MAT TO BE REMOVED  
1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

--- U.N.O., EXISTING ITEM TO BE REMOVED

**NEW**



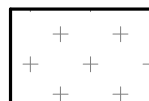
(N)  
CHAINLINK  
FENCE



(N) CONCRETE  
1:48 MAX CROSS SLOPE IN ALL DIRECTIONS



(N) TURF



(N) RUBBER MAT  
1:48 MAX CROSS SLOPE IN ALL DIRECTIONS

1  
ADD.

REFERENCE AS-2.0

**SITE LEGEND**

**ADDENDUM #1**

**1/8" = 1'-0"**

**GROSSMONT HIGH SCHOOL**

**CHILDCARE CENTER SHADE STRUCTURE  
GROSSMONT UNION HIGH SCHOOL DISTRICT**

8/9/2023 11:05:21 AM

RUHNAUCLARKE.COM  
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501(951) 684 4664  
5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010(760) 438 5899

RUHNAU  
CLARKE  
ARCHITECTS

DSA APN #: 04-121137

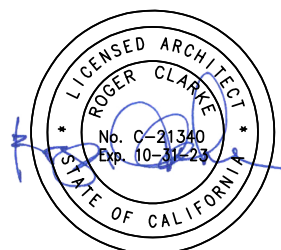
DSA File #: 37-H4

Date: 2023-08-09

Project #: 1-30-65

Sheet #: **ASK1.03**

Stamp:



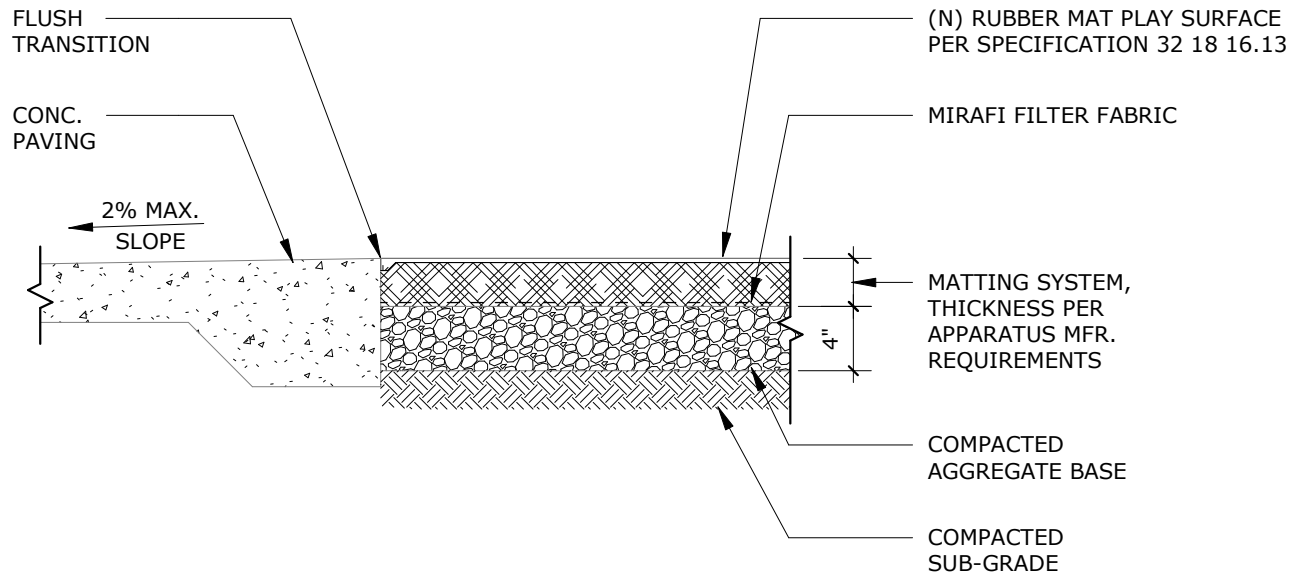
APPROVED  
DIV. OF THE STATE ARCHITECT

APP: 04-121137 INC:

REVIEWED FOR

SS ☒ FLS ☐ ACS ☒

DATE: 08/14/2023



(N) RUBBER MAT TRANSITION

1  
ADD.

REFERENCE 2/AS-2.0

ADDENDUM #1

1" = 1'-0"

1

GROSSMONT HIGH SCHOOL

CHILDCARE CENTER SHADE STRUCTURE  
GROSSMONT UNION HIGH SCHOOL DISTRICT

8/9/2023 11:05:21 AM

RUHNAUCLARKE.COM  
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501(951) 684 4664  
5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010(760) 438 5899

RUHNAU  
CLARKE  
ARCHITECTS

DSA APN #:  
04-121137

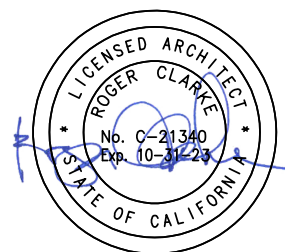
DSA File #:  
37-H4

Date:  
2023-08-09

Project #:  
1-30-65

Sheet #:  
**ASK1.04**

Stamp:





# Childcare Center Shade Structure Project Site Location

